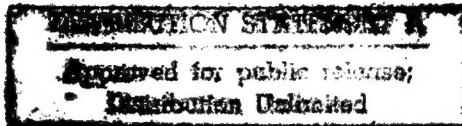


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# ***JPRS Report***



# **Soviet Union**

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## ***Military Affairs***

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# Soviet Union

## Military Affairs

JPRS-UMA-90-010

## CONTENTS

25 April 1990

### MILITARY-POLITICAL ISSUES

Yazov, Lizichev Speak at Writers Meeting [LITERATURNAYA ROSSIYA No 13, 30 Mar 90] .....	1
Ogarkov Presides over Conference of All-Union Veterans' Council	
[ <i>A. Negramotnov; VETERAN No 15, 9-15 Apr 90</i> ] .....	1
Joint Commission on 'Military Threat, Armed Forces' Reform'	
[ <i>M. Ponomarev; KRASNAYA ZVEZDA, 23 Jan 90</i> ] .....	1
Interview with Candidate, R Adm Selivanov [A.G. Selivanov; KRASNAYA ZVEZDA, 24 Jan 90] .....	3
Biographical Article On New GlavPU 1st Deputy Shlyaga	
[ <i>KOMMUNIST VOORUZHENNYKH SIL No 4, Feb 90</i> ] .....	4
Problems Encountered by Troops in Baku [A. Krayniy; KOMSOMOLSKAYA PRAVDA, 7 Feb 90] .....	5
Lt Gen Kondratyev's Program as Candidate from Turkestan	
[ <i>G. Kondratyev; KRASNAYA ZVEZDA, 8 Feb 90</i> ] .....	8
Lieutenant Purged From Party for Being Social-Democrat	
[ <i>N. Goncharov; KRASNAYA ZVEZDA, 10 Feb 90</i> ] .....	9
Union Procuracy To Reexamine Tbilisi Events	
[ <i>I. Kaplun; LITERATURNAYA GAZETA No 14, 4 Apr 90</i> ] .....	10

### MILITARY SCIENCE

Moiseyev Comments on Defensive Doctrine, Foreign Threat	
[ <i>M. A. Moiseyev; VOYENNYY VESTNIK No 1, Jan 90</i> ] .....	11
Golts Reemphasizes Soviet Security Concerns [A. Golts; KRASNAYA ZVEZDA, 21 Jan 90] .....	14
Critique of Arbatov on Sufficiency [LITERATURNAYA ROSSIYA No 12, 23 Mar 90] .....	16

### WARSAW PACT

Impact of Reforms on GDR Armed Forces [H. Unterdörfel; KRASNAYA ZVEZDA, 4 Feb 90] .....	19
---	----

### ARMED FORCES

New Assignment, Biography: Maj Gen Domashev	
[ <i>KOMMUNIST VOORUZHENNYKH SIL No 21, Nov 89</i> ] .....	21
New Assignment, Biography: Lt Gen A.I. Zakharov	
[ <i>KOMMUNIST VOORUZHENNYKH SIL No 21, Nov 89</i> ] .....	21
New Assignment, Biography: Col Gen V.A. Patrikeyev	
[ <i>KOMMUNIST VOORUZHENNYKH SIL No 21, Nov 89</i> ] .....	22
New Assignment, Biography: Col Gen I.N. Rodionov	
[ <i>KOMMUNIST VOORUZHENNYKH SIL No 21, Nov 89</i> ] .....	23
Recall of Prior Serviceman to Active Duty	
[ <i>I. Zotov; SOTSIALISTICHESKAYA ZAKONNOST No 7, 1989</i> ] .....	23
Changes to Law on Pensions	
[ <i>SOBRANIYE POSTANOVLENIY PRAVITELSTVA SOYUZA SOVETSIKH SOTSIALISTICHESKIKH RESPUBLIK No 30, 1989</i> ] .....	25

### GROUND FORCES

Improving Tank Undercarriages	
[ <i>A. Telminov and A. Zagudayev; TEKHNIKA I VOORUZHENIYE No 11, Nov 89</i> ] .....	27
Strela-2M Surface to Air Missile System [V. Knyazkov; VOYENNYYE ZNANIYA No 1, Jan 90] .....	30
Operating Features of GM-569 Tracked Vehicle	
[ <i>N. Kosarev; TEKHNIKA I VOORUZHENIYE No 1, Jan 90</i> ] .....	33

Features of IRM Vehicle /S. Vikulov and A. Vikulov; <i>TEKHNIKA I VOORUZHENIYE</i> No 2, Feb 90/ ..	35
Mirror' Gap in Firearms /V. Nikitin and V. Fedurin; <i>TEKHNIKA I VOORUZHENIYE</i> No 2, Feb 90/ ..	37

## AIR FORCE, AIR DEFENSE FORCES

Far East MD Pilots on Performance of SU-27 /V. Usoltsev; <i>KRASNAYA ZVEZDA</i> , 28 Jan 90/ .....	40
--	----

## NAVAL FORCES

Reduction Leads to Excess Junior Officers in Northern Fleet /Ye. Yermakov; <i>KRASNAYA ZVEZDA</i> , 8 Feb 90/ .....	42
---	----

## SPECIAL TROOPS

'Curious' Civilian Assignment of Construction Troops Noted /M. Syrtlanov; <i>KRASNAYA ZVEZDA</i> , 21 Jan 90/ .....	44
---	----

## REAR SERVICES, DEFENSE INDUSTRIES

Col Gen Babyev on Assistance to Dependents Leaving Azerbaijan /V.N. Babyev; <i>KRASNAYA ZVEZDA</i> , 30 Jan 90/ .....	45
---	----

TYL VOORUZHENNYKH SIL: 1989 Index of Articles /TYL VOORUZHENNYKH SIL No 12, Dec 89/ .....	45
---	----

## PRE-DRAFT TRAINING AND THE DRAFT

Experimental Military-Patriotic Lyceum in Kolomna /V. Yermolin; <i>KRASNAYA ZVEZDA</i> , 28 Jan 90/ .....	53
---	----

'Defense Physical Fitness Training' Program to Replace Pre-Draft Training /N. Yendovitskiy; <i>KRASNAYA ZVEZDA</i> , 8 Feb 90/ .....	55
--	----

Georgian Military Preparatory School Noted /B. Gambashidze; <i>MOLODEZH GRUZII</i> , 23 Feb 90/ .....	56
---	----

Rayon Pre-draft Training Center Created in Omsk /N. Knysh; <i>KRASNAYA ZVEZDA</i> , 3 Apr 90/ .....	57
---	----

## MILITARY HISTORY

On Military Reform in Prewar Era /P.F. Vashchenko, V.A. Runov; <i>VOYENNO-ISTORICHESKIY ZHURNAL</i> No 12, Dec 89/ .....	58
--	----

Maj Gen Yakovlev on Experience as Adviser in Vietnam /A. Yakovlev; <i>KOMSOMOLSKAYA PRAVDA</i> , 2 Feb 90/ .....	63
--	----

Military Side of Cuban Missile Crisis Recalled /A. Dokuchayev; <i>KRASNAYA ZVEZDA</i> , 4 Feb 90/ .....	66
---	----

**Yazov, Lizichev Speak at Writers Meeting**  
*90UM0470B Moscow LITERATURNAYA ROSSIYA*  
*in Russian No 13, 30 Mar 90 p 16*

[Unattributed article: "The Army and Literature: A Meeting at the Ministry of Defense"]

[Text] On March 24 1990, a group of writers met with Minister of Defense D.T. Yazov and GlavPU Chief [Main Political Directorate of the Soviet Army and Navy] A.D. Lizichev; also participating were senior officials of the Ministry of Defense, the Main Political Directorate of the Soviet Army and Navy, and representatives of central military and writer's publications (NASH SOVREMENNICK, MOSKVA, SOVETSKAYA LITERATURA, LITERATURNAYA ROSSIYA, and MOSKOVSKIY LITERATOR).

General of the Army D.T. Yazov told the writers about current difficulties confronting the country's military leadership and the Armed Forces as a whole, and about the Army's participation in extinguishing inter-ethnic flare-ups. He dwelt at length on the social consequences of the drastic Armed Forces reductions and Eastern European troop withdrawals that have to be overcome today.

After a short speech by General of the Army A.D. Lizichev who set forth his understanding of the transformations being conducted in the Army and in its propaganda apparatus, A.A. Prokhanov, council chairman of the newly formed social organization "The Officer's Assembly of Writers," spoke to those assembled. Both in his speech and in the addresses of Writers N.I. Doroshenko, S.A. Lykoshin, K.B. Rash, A.V. Fomenko, VOYENNO-ISTORICHESKIY ZHURNAL Editor-in-Chief V.I. Filatov, and other meeting participants the main concept was the necessity to intensify the struggle against attempts to undermine the prestige of the Armed Forces—the last and only guarantee of the stability of the state and society today. The writers sharply criticized what they considered to be the passive position of the central military press (including KRASNAYA ZVEZDA) in the current political struggle. On the contrary, kind words were spoken about VOYENNO-ISTORICHESKIY ZHURNAL which, thanks to its bold and sharp articles during the last two years, has increased its circulation by almost a factor of ten (which cannot be said about other military publications). KRASNAYA ZVEZDA Editor-in-Chief I.M. Panov explained the newspaper's position as striving for compromise and reconciliation of diverse, including incompatible, points of view.

On the whole the meeting left a completely businesslike impression: Both military personnel and writers were unanimous in asserting the necessity for all progressive, patriotic and cultural forces to cooperate to preserve and strengthen our multinational state.

**Ogarkov Presides over Conference of All-Union Veterans' Council**

*90UM0470A Moscow VETERAN in Russian No 15,*  
*9-15 Apr 90 p 3*

[Article by A. Negramotnov: "A Conference in the All-Union [Veterans'] Council"]

[Text] A thorough discussion on the permanent commission's work practices occurred at a conference of commission chairmen and their deputies that was conducted by All-Union Veterans' Council Chairman Marshal of the Soviet Union N.V. Ogarkov.

First Deputy All-Union Council Chairman A.I. Golyakov presented a report. Comrades S.S. Avramenko, I.A. Zubkov, B.T. Shumilin, L.A. Zemlyannikova, A.D. Deminov, Ye.A. Kozlovskiy, N.A. Gorbunova, G.A. Kiselev, V.D. Sozinov, G.I. Yeliseyev, I.S. Mednikov, and I.S. Semiokhin discussed the commissions' work.

There was an exchange of ideas on ways to strengthen organizational unity, activities to improve work with young people, to provide greater social protection for veterans, to deepen international ties, and to broaden contacts with the mass media.

Issues were discussed that are associated with preparations for the 45th Anniversary of the Soviet People's Victory in the Great Patriotic War.

It was stressed at the conference that in spite of the establishment of a commission for work with Armed Forces veterans, concern about them must become a vital matter both for the All-Union Veterans' Council and for all local commissions.

**Joint Commission on 'Military Threat, Armed Forces' Reform'**

*90UM0257B Moscow KRASNAYA ZVEZDA*  
*in Russian 23 Jan 90 First Edition p 3*

[Five members of a panel of experts discuss threats to the USSR's national security and the structure of the armed forces of the future with a foreword and conclusion by M. Ponomarev: "Using the Expert Game Method"]

[Text] The state of the military threat and USSR Armed Forces activities—these problems are currently attracting heightened attention. A recently completed independent public panel of experts was also tasked [to study] them. Senior associates of the CPSU Central Committee, representatives of the Ministries of Defense, Internal Affairs, and Foreign Affairs, scholars from a number of academic and departmental institutions, professors of higher educational institutions, primarily military [institutions], and representatives of various social organizations and movements participated in it.

How did this panel of experts proceed and, the main thing, what did it produce? We are offering the participants an opportunity to write [about their experience].

**Lieutenant Colonel G. ALIMURZAYEV, doctor of economic sciences and leader of an expert game**

The independent public panel of experts was conducted using the expert game method. Its concept of operations included a number of interrelated elements. In particular, it provided for the creation, study, and description of the very phenomenon of an independent public panel of experts.

During the expert game, we assigned ourselves the task to create and adjust mutual understanding mechanisms among those who currently not only confront each other but who are also beginning to fight each other.

Right now, game organizers are faced with summarizing its materials.

**S. KARAGANOV, doctor of economic sciences (Europe Institute, USSR Academy of Sciences)**

In my view, the success of our panel of experts was due to the fact that it brought together people of various professions and orientations who were however united by a common aspiration: To find optimal ways to provide for the security of the State and restructuring of our Armed Forces in accordance with developing external and internal situations. The time came for direct dialogue and those of us on the panel of experts were in constant discussion and in close contact with people who represented views of various departments and social movements. At times, the discussions were somewhat confused but to our surprise they were constructive and resulted in a serious drawing together of views.

In our expert game group, we studied the level and types of today's and tomorrow's threats and challenges to the USSR's national security. We debated the role of nuclear weapons in the next decade and we discussed the interests of our nation that we can and must protect. As a result, we succeeded in developing a proposal on contours of an optimal model of the armed forces of the future. Armed forces restructuring and reform are unavoidable. But in order to rationally conduct restructuring and reform, we need to have a precise goal. We also attempted to define this goal.

**Colonel N. KARASEV, doctor of economic sciences (Main Political Directorate of the Soviet Army and Navy)**

Our expert group was also engaged in an independent assessment of the military threat to the USSR and development of proposals on Soviet defense organizational development.

What basic creative results did we obtain that are vitally significant? In my opinion, we succeeded in convincingly proving the untenability of the opinion that has been prevalent that today there is no substantial external threat and we demonstrated that this threat actually exists. However, the nature of the threat has changed.

And this conclusion predetermined a package of proposals on Soviet defense organizational development that we proposed including in the final document of the panel of experts in the name of our group.

**Major General V. DUDNIK, candidate of pedagogical sciences (Military Political Academy imeni V.I. Lenin)**

We all agreed that raising the question of military reform is not only legitimate but necessary. An officer who came from a remote garrison with "a briefcase of instructions" from his coworkers managed to express this aphoristically. He said it like this: "If reform does not occur in the near future, we will lose the Army. There will be no one in command and also no one to command."

The experts of our group also arrived at the conclusion that military reform must encompass reform of military policy, restructuring of the structures that control military activities, and reform of the Army itself. Furthermore, radical restructuring of the Armed Forces personnel training system is mandatory. Political organs and the entire structure and system of party and political work also cannot remain unchanged. We need a different semantic fullness and an interpretation of such principles of armed forces organizational development as leadership by one man and democratic centralism.

The most advisable consequence of the implementation of military reform has been recognized as: Adoption of the concept of reform itself, after that adoption of a law on defense, and only then development of appropriate legal acts (regulations). Forestalling the introduction into force of such legal acts may block the idea of military reform itself.

**Major V. LOPATIN, USSR People's Deputy**

The Commission of the Armed Forces Subcommittee, the USSR Supreme Soviet Defense Issues and State Security Committee for preparation of a military reform program, this committee itself, and the Youth Affairs Committee acted as "customers" of the independent public panel of experts and as potential consumers of its product. We expected the panel of experts would allow discovery of new approaches to problems of military organizational development and determination of its correlation to the level of the military threat.

The impression is that the panel of experts was successful. General conclusions were made that confirm the need for quantitative and qualitative calculations of the level of the actual military threat not only in connection with the threat from without but also considering its internal sources. We all agreed with this. But along with that, we also discovered the polarity of the opinions of the participants—representatives of official structures and departments who at times attempted to insert previous points of view of their own departments into the new form of the independent panel of experts and another group of experts who were united, so to speak, on a platform of "genuine independence."

As a whole, the panel of experts demonstrated that it is one of the forms of public support for working out the problems of military reform.

This is the assessment of the course and results of the independent public panel of experts on the state of the military threat and the activities of the Armed Forces of the USSR as seen by its participants. For myself, I can add: I could not agree with all of the opinions and conclusions. But such a panel of experts is undoubtedly an interesting and highly promising form in which to study vitally important problems which to some degree reminds me of "brainstorming" [mozgovye ataki] which frequently produced impressive results. Major forces were activated and time will tell what their efficiency coefficient turned out to be.

#### Interview with Candidate, R Adm Selivanov

90UM0257A Moscow KRASNAYA ZVEZDA in Russian  
24 Jan 90 First Edition p 2

[Interview with Rear Admiral Aleksandr Gerontyevich Selivanov, chief of the Northern Fleet Political Directorate and candidate for RSFSR People's Deputy, by KRASNAYA ZVEZDA Correspondent Captain 3rd Rank P. Ishchenko: "For an Open and Honest Dialogue"]

[Text] Rear Admiral Aleksandr Gerontyevich Selivanov, chief of the Northern Fleet Political Directorate and military council member, has registered as a candidate for RSFSR People's Deputy in Northern Fleet Territorial Electoral District No. 512. Our correspondent, Captain 3rd Rank P. Ishchenko, met with him.

[Ishchenko] Aleksandr Gerontyevich, what compelled you to agree to run for office as a candidate for RSFSR People's Deputy?

[Selivanov] I cannot say that this decision was easy or obvious for me. Before I made it, I thought about it for a long time and I sought advice. But anyway I agreed and, by the way, I want to express my gratitude to the crew of the antisubmarine cruiser Baku for nominating me and I proceeded based on the following considerations. While analyzing the mood of Naval voters—both servicemen as well as workers and employees—during the time which has passed since the elections for USSR People's Deputies, I could not help but notice that the people were somewhat dissatisfied by the choice at that time. More precisely, not the choice itself, all of the USSR People's Deputies from our electoral districts are worthy of this honor, but by the fact that the Northern Fleet is not represented by a deputy-serviceman in the nation's highest organ of power. And the Northern Fleet needs such representation very much right now including on the republic level. The fact is that many of our problems that were previously resolved automatically are now progressing with great difficulty. I have in mind first of all supplying various materiel to the fleet for construction, trade, etc., that has drastically worsened. Furthermore, considering state interests, it is

impossible to forget about Northern Fleet seamen who are carrying out their duties under difficult conditions.

Another thing that motivated me to consent to run for office is dissatisfaction with how problems of our region, the European Far North, are being resolved. I do not think that they will all come to naught right now but, if I am elected a deputy, It will be worthwhile for me to speak out about them from the podium of the Russian Parliament. And we need to continuously talk about this and to remind both the official bodies and public opinion that in the beginning it will have a moral and political significance and afterward a practical one, too.

Thus, I based my decision to participate in the pre-election campaign on the urgent problems of the northern region and the Northern Fleet.

[Ishchenko] But are you not afraid of the voters' question: Why a deputy's mandate was previously practically a compulsory addition to the position of chief of the Northern Fleet Political Directorate?

[Selivanov] Of course, I have anticipated that question. But, in the first place, I cannot agree with the assertion that the deputy's mandate was a compulsory addition to this position. Let us say that my predecessor Vice Admiral Vargin did not have it. And, secondly, my main argument here is something else entirely. Believe me, my duty position does not prompt me to become involved in the pre-election campaign but my life and worldly experiences and the knowledge and skills I have accumulated which permit me—well, let me put it this way—to carry out these responsible duties just as well as other deputies. I went through the school of hard knocks. I lost my father when I was young; he died in 1943 near Stalingrad. I was a worker and I completed an enlistment in the Navy. After graduating from [military] school, I became acquainted with some of the worst Pacific Ocean Fleet garrisons where I spent 15 years....

[Ishchenko] In your view, what differentiates the current pre-election campaign from its predecessor—for selection of USSR People's Deputies?

[Selivanov] It seems to me that preparations for the elections and the elections themselves are occurring in a calmer atmosphere this time. There will be less emotion and a more reasoned and rational beginning. I arrive at that conclusion based on personal observations and by reading the central press. People are beginning to experience an intoxication caused by the possibility that has become available to freely express their will. They are thinking and are less likely to trust eloquent speeches and appeals and more likely to trust specific, real action.

[Ishchenko] And what are the main provisions of your pre-election program?

[Selivanov] To be perfectly frank, someone advised me not to focus attention on the fact that my program is based on the CPSU pre-election program and on the

Navy Communist and Murmansk Oblast Party Organization programs for tactical reasons. They say that disguising it may provide additional votes during the election. But I am a decisive opponent of such "courses" and flirting with the voters—our dialogue must be conducted openly and honestly. And therefore, I say always and everywhere: My platform has at its base the platform of the Party which I have belonged to for just shy of 30 years.

I will list certain points of my program that I find fundamentally significant. I favor unconditional implementation of the demands of CPSU Central Committee and USSR Council of Ministers Resolution No. 338 "On Measures To Accelerate Social Development of Murmansk Oblast in 1988-1990 and During the Period Until 2005." I favor implementing the "Extreme North and Children" Program of the Murmansk Department of the Children's Fund imeni V.I. Lenin for creation of a rehabilitation and health recovery system for invalid and orphaned children. I am for an income tax deduction in local Soviet budgets that will be withheld from servicemen and also a portion of the profits of defense industry enterprises. I am in favor of "polar" monetary incentives for career servicemen and military construction personnel. I am in favor of establishing a material stimulus, identical to the officer program, for naval warrant officers and warrant officers serving in polar conditions. I favor opening a branch of the Nakhimovskiy Naval School in the North Sea area...

[Ishchenko] The experience of elections in Western countries and our own experience as well demonstrates that having an attractive program is still not enough. Proper determination of pre-election campaign tactics plays an important role...

[Selivanov] I must say that I have no secrets of any sort and no tactical moves of any kind have been prepared and maybe that is unfortunate. To repeat myself, I favor an open campaign and I also appealed to my competitors while recording our candidacies at the District Electoral Commission. Propagandizing our own programs does not have to be accompanied by disseminating false information about our rivals.

[Ishchenko] Incidentally, how many competitors do you have and who are they?

[Selivanov] There are five altogether: Two servicemen, two production foremen from the ship repair plant, and the director of a middle school from Severomorsk.

[Ishchenko] Is such a large number of contenders for one deputy seat not disconcerting? And how do you relate to the fact that three servicemen are all vying for it at one time?

[Selivanov] The number [of candidates] is not disconcerting; it is, as they say, in the spirit of the times. And I do not experience any jealous feelings toward my servicemen-colleagues. I only think that the lack of a single Northern Fleet candidate may do us a disservice. In any

case, the election results in other republics is evidence that a serviceman-candidate's chances for success are in inverse proportion to their number in one electoral district.

[Ishchenko] You, Aleksandr Gerontyevich, are not the only candidate for RSFSR People's Deputy from the Northern Fleet....

[Selivanov] Yes, 11 men who are navy personnel went through registration. Of them, four are admirals, five are senior officers, and two are junior officers. I think that our voters have manifested a high level of activity while nominating candidates.

I would like to take advantage of this opportunity to say that the activities of Navy society also turned out to be unusually high when candidates were nominated for local Soviet People's Deputy's. About 400 Navy representatives were nominated altogether. Seventy three percent of them are officers and thirteen percent are naval warrant officers or warrant officers. The remainder are career servicemen, workers, and employees. Ninety three percent of the total number are communists and 2.6 percent are women. A characteristic feature is that many alternative candidates have been nominated—at times up to 3-4 for a mandate from one military unit. This is a good sign and is evidence that the time of voucher candidates and candidates programmed for success has irretrievably passed.

#### Biographical Article On New GlavPU 1st Deputy Shlyaga

90UM0405A Moscow *KOMMUNIST VOORUZHENNYKH SIL* in Russian No 4, Feb 1990  
(Signed to press 13 Feb 90) p 71

[Biographical article on Colonel-General Nikolay Ivanovich Shlyaga who was appointed first deputy chief of the Main Political Directorate of the Soviet Army and Navy]

[Text] Colonel-General Shlyaga, Nikolay Ivanovich, has been appointed first deputy chief of the Main Political Directorate of the Soviet Army and Navy

He was born 1 May 1935 in the village of Peredreyka in the Petrikovskiy Rayon in the Gomel Oblast to a Belorussian peasant family with many children. After he finished ten years of school he entered the 4th Military Automobile Institute.

He began his career as an officer in 1958 in the Red Banner Belorussian military district, as a platoon commander in an automobile school. After a year the school's Komsomol members elected Lieutenant N. Shlyaga as their secretary and for an entire decade work in the komsomol became his main occupation. The posts came one after another. Secretary of the Komsomol

organization of a separate motor transportation battalion, secretary of the VLKSM [All-Union Leninist Young Communist League] committee of a pontoon bridge regiment, deputy chief for Komsomol affairs of the political department of a motorized rifle division, senior instructor of the political department of a combined arms army and deputy chief for Komsomol affairs of the political department of the same army.

Beginning in 1969 he was deputy commander for political affairs of a motorized rifle regiment. Then for two years he was deputy chief and for more than three years chief of the political department of a tank division. From this position he was detailed to the CPSU Central Committee apparatus maintaining his rank in the Armed Forces. He worked as an instructor and deputy sector head of the department of administrative organs. In 1983 he was sent back to the troops as first deputy chief of the political directorate of the Central Group of Forces and here he became a member of the military council and chief of the political directorate.

In July 1987 he was again transferred to the CPSU Central Committee as a sector head and soon after became deputy head of a subdepartment in the state-legal department.

He graduated with honors from an extension program of the Higher Party School attached to the CPSU Central Committee (1972) and the V.I. Lenin Military- Political Academy (1975).

He was in the ranks of the CPSU for more than 30 years. He was elected member of the bureau of city and oblast CPSU committees, deputy of the city and oblast soviets of people's deputies. He was a delegate to the 28th Congress of the Belorussian CP and the 27th CPSU Congress.

He was decorated with the Order of the Red Star (1985), the order "For Service to the Motherland in the USSR Armed Forces" Third Class (1975), the Order of the Red Star (ChSSR, 1987) and many Soviet and foreign medals.

He was promoted to Major-General in February 1984, Lieutenant-General in May 1987 and Colonel-General in February 1990.

He was married in 1959. His wife, Mariya Vasilyevna, born in 1938, is a teacher. Two daughters. The elder graduated from the Moscow State Institute of International Affairs as an international economist. The younger graduated from the Military Red Banner Institute and is a senior lieutenant. Both are married to officers. There is a grandson.

#### Additions to the Portrait (From the Comments of his Peers)

"Cultured, congenial, he knows how to win over the personnel..." "He possesses a sense of the new and a high capacity for work. He knows how to analyze a situation

in depth and draw the right conclusions. Once a job is begun, he takes it to the end..."

"He is attentive towards people and is considerate. In his dealings with people he is polite and tactful. He is simple and accessible. At home he is modest and a good family man."

#### From Answers to Questions From the "KVS" Questionnaire

Which of the positions which you have held made the deepest impression on you and why?

The position of political department chief. It made an impression because it allowed me to be constantly closer to people, to communists, to real life and to concrete, solvable problems where it was possible to feel the results of my work and the satisfaction of what was completed and the dissatisfaction with what was not completed.

What do you value most in people?

Modesty, kindness and Bolshevik altruism.

And what do you dislike the most?

Baseness.

What do you like to do in your free time?

I almost don't have any free time but if I unexpectedly get some, I like to listen to music and read..."

What would you like to wish our young communists?

To be active participants of perestroyka in the army and navy and to value their membership in the party, to carry high the honor and dignity of being a communist in the army and navy!

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#### Problems Encountered by Troops in Baku

90UM0303B Moscow KOMSOMOLSKAYA PRAVDA  
in Russian 7 Feb 90 p 4

[Article by special correspondent A. Krayniy: "Tanks and Truth. Baku: The View From Within Armor"]

[Text] "Things are frightening at night. My heart thumped in response to every sound outside the door, every footstep and sigh. I couldn't sleep. I would roll up in the chair and count the minutes—if only dawn would come sooner, if only it would be day sooner. And Mitka, snoring away, was oblivious to it all.

"It's as if someone is slowly choking you with his hands, and you don't have the strength to pry him away, to scream, and anyway, who is going to hear? We were alone on the stairway landing. While the pogroms against the Armenians were going on, we shook with fear, and my husband bit his lip: 'Where are the troops?' Then the troops came into the city, and once again we shook with fear.

"During the day he managed to break through to the outside for a few minutes. He was pale, and I felt sorry for him—he was unable to find a place for himself in all of this either. And then we were driven away not by him but by his soldiers. One assault rifleman was assigned to us, Mitka and I lay down on the bed of the vehicle, and we drove away. To the military airfield. It would seem that everything should now be behind me, that there is no longer any danger, but inside I feel like my chest is in an icy grip; even here in Moscow, at my mother's, I can't relax...."

(From the story of an officer's wife who asked not to be identified).

The shots broke out suddenly like rain. Tension had already been hanging over the city for a week now, but the troops did not appear on the streets of Baku until 0030 hours on the twentieth of January. The militia patrols—reinforced to six men—were there more to create an appearance than to keep order. They stood at the intersections, while just 200 meters away people whose only fault was that they were born Armenian were being plundered and killed. A regiment of internal troops that had managed to break through was guarding the buildings of the Central Committee and the Ministry of Internal Affairs, and they would not venture out into the streets. The Baku garrison was blockaded in its barracks, and units that were arriving in the city were bottled up at the airfields. The regiments had run out of food, and the soldiers had already spent several days on dry rations. Attacks on armories had begun both in Azerbaijan and in Armenia, highway and railroad traffic had come to a standstill, and commands to put an end to the lawlessness never came in.

Knowing little at that time, I tried to gain an understanding of what was going on: Why was this happening? The explanations I heard—"There wasn't enough time, it was technically impossible"—were not persuasive to me: What if war were to break out tomorrow? Would we have time then? I don't know, I don't know. All I know is that the roads to Baku were still open on the twelfth and thirteenth of January, and wherever they were blockaded, it was on a makeshift basis.

An opportunity was lost, and that which could have been done, literally with little bloodshed, was finally accomplished with considerable bloodshed. Very considerable, if you remember that Soviet troops were entering a Soviet city. They entered in order to restore order, justice and law. What sort were they, these occupation troops? What in Baku could be occupied by Senior Warrant Officer O. Akhundov, an Azerbaijani who died in the hospital from "a bullet lodged in the rib cage and a bullet through the abdomen"? Or Colonel Nikolay Ivanovich Opalev, the military hospital's deputy commander for political affairs, who concealed Armenians in the hospital together with his chief until the arrival of the troops? In a hospital which was practically defenseless, and in which the only weapon was a scalpel. Or Sergeant Volodya Kuskov from Leningrad, who was strangled

with a piece of wire (an Afghan technique by the way), though luckily surviving, being a strong lad?

Gunfire. Single reports were followed by bursts of automatic fire, which crackled with a dry sound, like tearing paper. Flocks of fiery-blue tracer rounds criss-crossed the night sky. The engines of tanks and APCs roared in the distance.

Zhenya Solovyev, the 23-year-old commander of a motorized rifle company, was late for the start of the battle. He was still standing on the threshold of the weapon storage room, on the threshold between light and darkness, personally issuing ammunition, when shots rang out quite close, near the checkpoint of the Salyanskiye Barracks.

The day before, Solovyev, another two company commanders and the battalion commander drove out for reconnaissance. They traveled in an ambulance, unarmed and without soldiers, seeking a road free of obstructions which could be used at the needed moment to reinforce the guard on the district's armories. Given the present situation, the existing protection might not be enough, the armories could be overwhelmed, and then....

They were unable to find a clear road—everything was clogged with heavy trucks, buses and bulldozers. And so they returned.

The Deputy Battalion Commander for Political Affairs was the first man Solovyev came across as he rushed out onto the night-shrouded drill field.

"They're firing on the barracks from behind the fence!" he cried, gasping for breath.

Solovyev leapt toward the checkpoint, where he saw someone shooting from beneath the wheels of an Ikarus blocking the road.

Before he could grasp what was going on, he felt a blow in his chest, like someone hitting him with a fist. The 23-year-old Company Commander was not privy then to what it is that a man experiences when he is fired upon—it simply never came into his mind to put on a flack jacket. A bullet whistled by, burying itself into the fence, and Solovyev's bewilderment was replaced by calm, cold rage. He could no longer hear the chatter of the surrounding gunfire, or the cries of the wounded. His sights were fully on the person lying by the wheels of the Ikarus. All of the mistakes of the politicians, all of the unsolved economic problems reduced to a situation where during a warm Baku night, two armed men were lying on the ground 20 meters apart, with but one desire dominating their being: to kill the other.

Solovyev suddenly felt a burning in his leg, and he returned several rounds at the wheels of the Ikarus. He saw the other bring his arms together, as if he was going to dive into water, and fall.

It was all over, it seemed. Zhenya felt his head spinning. Reservists leapt out from the checkpoint and dragged him back into the building. After that, under the cover of four assault riflemen—a sniper was holed up on a rooftop, firing on the drill field—Lieutenant Yevgeniy Solovyev managed to make his way on foot to the medical station, and then to the hospital, to the operating table.

It was there that the night came to an end for him. But for others, it went on.

At approximately this time, 20 kilometers from the Salyanskiye Barracks, Special Forces Lieutenant-Colonel Valeriy Koposov was walking with a megaphone at the head of a column, telling the people to disperse, and to not block the way of the troops. Someone from the crowd threw a Molotov cocktail at him, which struck his helmet, setting his clothing afire and burning his hands and face. Senior Lieutenant of Medical Service Anatoliy Kurepin began rendering assistance to Koposov. One could see that he was unarmed, and that he carried a pouch bearing a red cross on his side, but the crowd stoned him anyway.

And at 0140 hours, a soldier died in his arms from gunshot wounds in the vicinity of the Baladzharskiy Downgrade....

Gunshots bring on gunshots, evil brings on evil, and hatred can only bring on hatred. One must be a professional in order to keep a cool head in such a situation. And that was what they were.

The parachute regiment attacked (Lord, what we have come to!) on Baku from the direction of Kyurdamir. The regiment traveled 180 kilometers, expending 263 cartridges. Meeting an obstruction on the way, the parachute company was in a hurry, and with a "Hurrah!", without firing a single shot, it dismantled the obstruction, detaining 70 persons "to get answers to some questions." The rest simply fled. If only all had advanced in this manner.... There were, unfortunately, other examples as well. An "extreme situation" in which the command permitted the troops to open fire, each had to understand to the measure of his military professionalism, and ultimately to the measure of his fear. Reservists in the Salyanskiye Barracks worked on the sniper holed up on the roof of the residential building with automatic fire. They did not hit the sniper: It was later on, in daylight, that he was brought down by a single shot from a warrant officer who had served in Afghanistan, but in the meantime the soldiers shot up a sizable number of windows (this was, after all, a residential building! and at night!). Were they really to blame for this?

The morning promised a sunny day. The nighttime gunfire seemed to have been a dream, and the view from the hotel room was almost idyllic—the sea, a white steamship, the quay.

But then I turned the corner and my gaze fell upon an APC and a swarthy lad beside it in a flack jacket. My first sensation was relief: The last days prior to the entry of the troops were a time of constant tension—the turmoil continually lapped over the edge, threatening to become unchecked. It may be that I was developing a kind of "Afghan syndrome," and I have tried again and again to explain, with a stubbornness worthy of the best imitation, what really happened in that black January in Azerbaijan, but I must repeat stubbornly that this was a civil war, and that each day of delay in making the decisions that had to be made cost the lives of obedient and not-so-obedient taxpayers who maintained the government, people who should have felt assured under all circumstances that the state would protect them. But it did not. Refugees were strung out along the roads, casualties cried out in agony, and the unseeing eyes of the dead stared into the high winter sky in astonishment. Their blood evoked more blood, and so on, and so on, and so on....

The army was not late—it was the politicians who were late. And when the decision was finally made, young people in field dress began carrying it out. It was bitter and painful for them to do so, but they had to literally place their lives on the line between the two union republics.

The name of the lad beside the APC was Volodya. We got to talking, and I learned that we were compatriots from the Moscow region, that he was going home in spring, and that he had also served in Fergana, in Sukhumi, and here in Baku as well, for the second time. Smiling, he turned his back: "Do you see there? A lucky hit," showing me the scorched tatters of his flak jacket, burnt by a Molotov cocktail. "A little higher and I'd have been a goner."

It has been a year and a half that he has been roaming the country together with his subunit, a year and a half of sleeping wherever he put down his head, a year and a half of carrying an assault rifle around on his shoulder, just as habitually as he used to carry his sports bag some time ago (in what life was that?). Is he to blame, are his comrades, sleeping behind armor on this sunny morning, to blame for this? And what fault is there in the airborne troops from Kostroma and Pskov, from Ryazan and Vitebsk? They created a screen between the Azerbaijanis and the Armenians. I saw tanks pulling apart the ruins of Leninakan in that terrible December. There were not enough cranes and dump trucks in the city and there was no light, water, bread or preserved blood in the city. The army—it arrived in just six hours!—baked the first bread in field bakeries, military doctors operated on casualties right within the ruins of the hospital, on the ground, and later when it became dark, they worked in the light of vehicle headlights. All military transport aviation, down to the last IL-76, was committed to carrying cargo to the earthquake site, and the pilots remained in the sky for days on end: I saw their faces, gray with fatigue, as well

as the faces of the military air traffic controllers at Leninakan Airport. Were any words of gratefulness said to them? Begrudgingly....

At that time I sensed in Leninakan that the country was left with but one state institution capable of acting with mobility and efficiency. There were of course examples of another sort in Baku as well, there were the countless inspectors with their quickly mounting paperwork—in quantities impossible to measure!, and there were the VIPs with big stars on their shoulderboards, but there were also the soldiers, the sergeants and the officers. Men of duty, carrying upon their shoulders the burdens and deprivations of service, as it says in the regulations. Let me add: of close to wartime service.

But the assault rifle is not the only weapon in the hands of the soldier in these tragic days. There were the angry lines at the bread shops, the closed fueling stations and newspaper stands, and the continually interrupted communications. The army also had to deal with all of this. It had it bad itself—I saw one APC towing another—there was not enough fuel. In several days the army was able to bring gasoline into the city, military signalmen took their seats at the switchboards, the newspaper resumed publication, and gradually the lines at the bread shops disappeared.

The army went into action when both time and reason were exhausted. When angered heads and savagely beating hearts could respond to only one argument, to only one truth—force.

This is a truth which tanks know.

But the world visible from behind the safety glass of an armored vehicle is too narrow and too black-and-white. Tanks can halt bloodshed. But the hope that they could create a new, just reality is illusory. Gunfire can compel us to think, but assault rifles will not solve the heap of economic, political and international problems.

Two months prior to commitment of the troops he, the Azerbaijani man, sent his Armenian wife and children to a distant village, to relatives. A week prior to commitment of the troops he, an Azerbaijani, could leave the republic, while she, an Armenian, and her children could not—posts manned by people with tricolor armbands carefully checking all vehicles and the passports of passengers stood on the roads. On the day prior to the commitment of the troops he spent the night sitting on the porch of his country house with a hunting rifle in his hands, having distributed his cartridges in two piles—16 with which to fight off the attackers and four for his family. After the twentieth of January he rode to the nearest military unit, where he was given a vehicle, and he then drove his family to a military airfield.

### Lt Gen Kondratyev's Program as Candidate from Turkestan

90UM0290A Moscow KRASNAYA ZVEZDA in Russian  
8 Feb 90 p 1

[Interview with Lieutenant General G. Kondratyev, first deputy commander of the Turkestan Military District, by Lieutenant Col V. Astafyev, KRASNAYA ZVEZDA correspondent in the Turkestan Military District: "Dialogue of the Contenders"]

[Text] Lieutenant General G. Kondratyev, first deputy commander of the Turkestan Military District, conducted this meeting with the voters on his rival's home base at the Republic Union of Composers Assembly Hall during the campaign for mandate of Uzbek SSR People's Deputy. His opponent is A. Dzhabbarov, Chairman of the Union of Composers of Uzbekistan.

Their designated representatives began the rivals' discussion with a "reconnaissance in force" at the location in the Republic Supreme Soviet. They talked about the candidates' records and provided detailed descriptions of their candidates professional and moral qualities. We sensed they were faced with a fierce campaign and that both rivals were worthy of each other. Akhmed Khamidovich Dzhabbarov fought in the Great Patriotic War, has experience in socio-political work, and prestige within the republic's cultural circles.

Georgiy Grigoryevich Kondratyev was born almost 20 years later. Earlier, after the ninth grade, he went to work as a metalworker at a factory. Afterward, he tied his fate to the Army, graduated from the Kharkov Tank Command School, and passed through all stages of service from platoon commander to first deputy commander of a military district.

The candidates told the voters about their plans. Both of them are communists and they built their pre-election campaign platforms based on the Uzbekistan CP Central Committee platform. Akhmed Khamidovich primarily emphasized the problems of the cultural development republic population. In his program, Georgiy Grigoryevich touched on all of the main burning issues of today's Uzbekistan: The economy, social sphere, and ecology.

The voters were interested in the candidates' positions on all trends of socio-political life. The atmosphere in the hall made one sense that there were more of A. Dzhabbarov's supporters here. Questions were more often addressed to his rival:

—What is the ratio of representatives of local nationalities in the leadership of the TurkVO [Turkestan Military District]?

Georgiy Grigoryevich answered: "All first secretaries of the Central Asian and Kazakhstan CP Central Committees are members of the military district military council."

It seemed that this was news to many of the voters.

—You take advantage of the infrastructure in the Republic. What is your contribution to its development?

And once again a detailed thorough answer on the Turkestan soldiers contribution to housing construction, utilities construction, and military units' payment for use of water and electricity....

—Life has shown that the platforms of the Republic's leadership can change. On whose side will you be if they begin to contradict the people's interests?—This question was posed to both candidates.

"On the side of the people," answered Dzhabbarov.

"I will strive to keep my platform from diverging from the peoples' interests," said Kondratyev.

The voters' meeting with the People's Deputy candidates lasted more than two hours. Dozens of questions and mandates [from the voters]. The most varied mandates. Here was also a request to move Tashkent Zoo beyond the city limits, to become involved with providing public services and amenities, and the desire that military schools accept more young men of local nationalities, a demand for the rebirth of the Aral [Sea], to a proposal on the establishment of young peoples' cultural centers in all of the Republic's cities and their affiliates in rural areas. An officer who lost his wife last year during childbirth demands the immediate establishment of a rapid response resuscitation system....

While listening to these impassioned speeches of people who are sincerely concerned about the future of the Republic and the nation, I was reminded of another meeting. Two days earlier, Lieutenant General Kondratyev, as the former first deputy commander of the 40th Army in Afghanistan, invited reserve warrior internationalists residing in Tashkent to the District Officers Club. He invited them in order to find out how they are living today, what they need, and what assistance we need to give them. The conversation with them was specific and about those issues. But several representatives of one of the informal organizations penetrated into this meeting. And even though this was not a meeting of voters with their candidate, the informalists undertook an attempt to discredit the general as a candidate for people's deputy and they began to ask provocative questions. However, nothing came of it since the former soldiers quickly saw through and rebuffed them.

"Today's meeting occurred in a business-like, good-natured atmosphere," said Georgiy Grigoryevich after the conversation with the voters had ended, "and once again demonstrated that the majority of the population is interested in a constructive solution to problems facing the Republic and the nation. It is true that there are also forces that are attempting to destabilize the situation and divide the people. Have these evil schemes

been disrupted? This in many ways will depend on the activities of the newly elected local Soviets and the Republic's Supreme Soviet. Well, on 18 February the people will decide who will win the election, my rival or myself.

#### **Lieutenant Purged From Party for Being Social-Democrat**

*90UM0298A Moscow KRASNAYA ZVEZDA in Russian  
10 Feb 90 First Edition p 2*

[Article by TASS correspondent N. Goncharov, Orenburg: "You Can't Occupy Two Chairs"]

[Text] The Primary Party Organization of the Orenburg Higher Military School for Pilots imeni I.S. Polbin has expelled Senior Lieutenant N.D. Tutov, a political worker, from the CPSU.

A Communist, Nikolay Dmitrievich considered it possible simultaneously to occupy the position of co-chairman of a Social-Democratic organization, to which he was elected in Tallin in mid-January. The Communists inquired as to what their party colleague's ideological and political position actually was. Telephone calls were made. People asked to which party, the Social-Democratic or the Communist, N. Tutov now belonged.

He rendered a report at a meeting of the primary party organization in January and then commented upon the proceedings of the founding congress and parts of the association's charter. The Party Organization became firmly convinced that the SDA [Social-Democratic Association] was nothing other than a party, since it had declared itself to be a legal person, had its own charter, its own program, its own press, badge, letter-heads and other attributes and was organizationally made up of Social-Democratic parties of Union republics.

As a result the CPSU primary organization deemed it incompatible to belong simultaneously to two parties, one of which is an alternative to the other. The meeting was attended by 22 of the 27 Communists registered in the primary organization. The vote was 17 for expulsion and two against, with three abstentions.

After studying the matter, a party commission under the school's political section affirmed the decision of the primary organization on 6 February. The same reasons were cited for the expulsion: "For violating the Program and Charter of the CPSU and for breaking the ideological unity of the party."

Following the session, I. Banar, secretary of the party commission, made the following statement:

"I consider the commission's decision to be correct and objective. One cannot occupy two chairs. Nikolay Dmitrievich did not want to give up either of them. It was not to his advantage to give up the CPSU, since he was a political worker, and he was gripped by extreme vanity at having been elected co-chairman of the new party. We could see that he had no firm convictions, or

else he would have voluntarily left the CPSU. He was offered this opportunity here in the commission. Nikolay Dmitrievich had a reason for repeating several times that we should wait for the 28th CPSU Congress, at which time everything would become clear.... A people's deputy of the USSR and a member of the USSR Supreme Soviet above all should have been consistent and precisely determined which party was dearer to him."

### Union Procuracy To Reexamine Tbilisi Events

90US0766A Moscow LITERATURNAYA GAZETA  
in Russian No 14, 4 Apr 90 p 2

[Article by I. Kaplun, LITERATURNAYA GAZETA special correspondent and colonel of legal services (retired): "Departmentalism—the Enemy of Objectivity"]

[Text] On 29 March 1990 the Main Military Procurator's office held a press conference for the first time (another achievement for glasnost!).

Among the numerous issues raised by journalists for the chief military procurator—deputy procurator general of the USSR, Lieutenant General of Legal Services A.F. Katusev—there was a question about his attitude toward the distrust of the military procuracy now being unambiguously expressed in connection with its investigation of the criminal case in respect of the events in Tbilisi.

A.F. Katusev replied that this mistrust was in fact voiced in an interview E.A. Shevardnadze gave to the journal OGONEK and in statements made by a number of people's deputies. They accused the military procuracy of a lack of objectivity and of protecting the departmental interests of the Ministry of Defense. A.F. Katusev expressed his attitude toward these accusations

in an open letter to E.A. Shevardnadze published in SOVETSKAYA ROSSIYA on 25 March this year.

"Now they are telling us that the military procuracy should not even have been involved in the investigation of this matter," A.F. Katusev said. "But it was a case concerning illegal actions by servicemen, and this is our area of investigation. Moreover, in accordance with the requirements of the law, the military procuracy had to investigate the actions of both sides as one case. But the leadership of the USSR Procuracy decided to split the case (it enjoys the competence to do this), assigning the Main Military Procuracy to deal with the actions of the servicemen, and this we did without any kind of prejudice. BUT NOW I MYSELF ASKED THE QUESTION OF WHY THE CASE WAS TAKEN AWAY FROM US. AND IT WAS RECENTLY ANSWERED. THE UNION PROCURACY SET UP A SPECIAL INVESTIGATING TEAM FOR FURTHER INVESTIGATION, which included workers from the territorial procuracies from various regions in the country, including from Georgia."

I think that the decision that was made was quite correct. Formally the chief military procurator is not subordinate to the Ministry of Defense and it is as if there were no dependence between the military procuracy and the command. Nevertheless... Who is it that gives a military procurator his military rank, and on whom does he depend for material and technical support? (Incidentally, A.F. Katusev himself talked about this at the press conference). We cannot, of course, claim that it was precisely these circumstances that influenced the conclusions of the investigation. However, they should have been taken into account right from the start, thus avoiding the danger of inflaming passions. It has been known for a long time that departmentalism is the enemy of objectivity. And in this case objectivity and lack of prejudice were particularly essential.

**Moiseyev Comments on Defensive Doctrine,  
Foreign Threat**

90UM0427A Moscow VOYENNYY VESTNIK in  
Russian No 1, Jan 90 (signed to press 22 Dec 89) pp 5-9

[Interview with Army Gen Mikhail Alekseyevich Moiseyev, chief of the USSR Armed Forces General Staff and first deputy minister of defense of the USSR, by the editors of VOYENNYY VESTNIK; date and place not specified: "What the Army Is To Be Like"]

*[Text] Mikhail Alekseyevich Moiseyev was appointed to the responsible position of chief of the USSR Armed Forces General Staff and first deputy minister of defense of the USSR at a difficult time. New political thinking is breaking customary stereotypes and settled views on problems of war and peace, destroying ideological dogmas, and altering opinions about ways and methods of providing reliable national security. Army General Moiseyev is doing much to transform political ideas and concepts into specific provisions of the USSR's defensive military doctrine. Under his direction the General Staff is unilaterally reducing the Armed Forces by 500,000 persons and a corresponding amount of military equipment, backing up Soviet proposals at the Vienna and Geneva talks with persuasive calculations. There is intensive, day-to-day work of directing perestroika in the Army and Navy and orienting their organizational development toward qualitative parameters. The contribution made by the Chief of the General Staff here is difficult to overemphasize.*

Priority in assuring national security is given to political means under conditions of the international detente that is gathering force. New thinking essentially is being implemented in USSR policy and is producing appreciable results. Our forces have been withdrawn from Afghanistan, the unilateral reduction in the Soviet Armed Forces is continuing, and reassuring progress has begun to show at the Vienna and Geneva talks.

The Soviet Union's indisputable achievements in the international arena are causing a feeling of euphoria in some representatives of our society. An underestimation by many people of the realities and contradictions of the modern world, pacifist sentiments, and an attempt to depreciate the Army's role apparently stem from this. And it is not by chance that Soviet citizens express justified uneasiness over the state of national defense capability, over a drop in the authority of the Armed Forces, and over unceasing attacks on the Army. An assessment of these negative phenomena was provided at a session of the Main Military Council of the USSR Defense Council on 18 October 1989.

The editors decided to ask Chief of the USSR Armed Forces General Staff and First Deputy Minister of Defense of the USSR Army General M. Moiseyev to answer a number of questions which trouble our readers.

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[VOYENNYY VESTNIK] Today we can name a number of interesting publications revealing the content

of USSR military doctrine, which has a strictly defensive direction. Your speeches in the pages of the central press also are among them. But VOYENNYY VESTNIK's readers, the majority of whom are professional military, are asking for an explanation of individual provisions of the doctrine. The question probably encountered most often in the editorial mail is "Are the Soviet Armed Forces capable of repelling an attack by conducting exclusively defensive operations? Does the mission of decisively defeating an aggressor, including on his territory after repulsing an invasion, now remain?"

[Moiseyev] Under present-day conditions preventing war, both nuclear as well as conventional, is the most important mission of our Armed Forces stemming from Soviet military doctrine. At the same time, they are being kept in a combat readiness sufficient to keep anyone from catching us unawares, but if an attack is made against the USSR, the aggressor will receive a crushing rebuff.

Until recently we planned to repel aggression both by defensive and offensive operations, with priority given to the offensive. At the present time we have revised views on methods of fighting a war in defense of socialism based on new political thinking. Defensive operations are seen as the basic form of Soviet Armed Forces' retaliatory action in case of an attack on our country.

But this does not signify their passive character at all. *We will defend the freedom and independence of the Soviet Motherland and of our allies together in a most decisive manner.* Therefore counterattacks and counterthrusts as well as counteroffensives aimed at destroying an invading enemy unquestionably will find their place within the framework of defensive operations.

With respect to subsequent operations of the USSR Armed Forces, including on the aggressor's territory after repulsing his invasion, everything will depend on the scale and direction of aggression, nature of military operations, and means and methods of warfare being used.

I can say one thing very definitively: Soviet military doctrine is subordinated to the mission of preventing war, and we will apply a maximum of effort to carry out that mission.

[VOYENNYY VESTNIK] Despite public appeals in NATO countries to reject the image of the enemy in the person of socialist states, purposeful preparation continues for a struggle against Warsaw Pact armies. North Atlantic Treaty Organization armed forces development programs are being strictly implemented in priority directions. How do you assess the nature of the threat: as growing, stable, or abating?

[Moiseyev] The Warsaw Pact countries' vigorous foreign policy activity, the USSR's constructive disarmament proposals and initiatives, and its unilateral steps to reduce military potential are contributing to a growth in

confidence in our country among the western public and are forcing the leadership of NATO countries to adjust their approach to problems of war and peace. As a result, international tension has subsided and it has become calmer and safer in the world. The "cold war" is retreating and preconditions are being laid for excluding war from the life of mankind.

Unfortunately, however, positive processes in international relations still cannot be deemed irreversible. A military threat remains for the USSR and its allies. The chief reason for this is the U.S. and NATO policy of acting from a position of strength, which remains invariable. Speaking recently before participants of a seminar on national policy problems, U.S. Secretary of Defense R. Cheney declared that the United States and its allies have no grounds for revising the officially accepted strategy or for making any kind of substantial changes in it, and that the West's strength continues to be based on the political and economic unity of the North Atlantic Alliance and chiefly on its military might.

And these are not simply words. Behind them are the actual programs for building up U.S. military might. For example, by the year 2000 the Pentagon plans to have in its arsenal 20 nuclear-powered submarines, each with 24 Trident II missile launchers; a considerable number of ICBM's, including MX and Midgetman; and approximately 450 strategic bombers (including 130 B-2 stealth aircraft).

While declaratively proclaiming NATO's adherence to objectives of preventing war and to affirmation of a new model of relations between East and West, in their strategy NATO countries continue to place reliance on force and nuclear deterrence. They have not given up plans of "up-arming" in the sphere of tactical nuclear weapons—stationing a more sophisticated missile with a range up to 500 km in Europe in place of the Lance missile, increasing the number of U.S. aircraft that are nuclear weapon platforms on the territory of Great Britain, creating a new air-to-surface missile with a range over 400 km, outfitting aircraft of tactical strike aviation with it, retargeting a portion of U.S. Tomahawk sea-launched cruise missiles against targets in Europe, and so on. Further development of conventional arms also is planned based on their qualitative improvement.

We cannot help but be disturbed by the extraordinarily high aggressiveness of NATO Armed Forces training. The territory of bloc countries essentially has been turned into a military training ground. A large number of various exercises are held here during the year near the borders of Warsaw Pact countries. Some 20 large ground, sea and air exercises were held within the framework of the annual Autumn Forge maneuvers during September-October 1989 in which over 200,000 servicemen, 1,000 tanks, up to 2,000 combat aircraft and around 400 ships took part.

At the very same time, PACEX-89, the largest exercise since World War II, was conducted in the Asiatic-Pacific

region involving the armed forces of a number of countries situated there. This means over 200,000 persons, over 500 aircraft and up to 100 combatant ships and vessels. It was coordinated in concept and time periods with the series of Autumn Forge-89 fall exercises in Europe and in the Atlantic, which attests to a unified direction of U.S. and NATO operational measures for rehearsing plans for conducting military operations simultaneously in different theaters of operations.

*All these facts confirm that the military threat to the Soviet Union and other Warsaw Pact countries has not disappeared.* We naturally are forced to take that situation into consideration and take appropriate measures so as not to allow ourselves to be caught unawares.

[VOYENNYY VESTNIK] It is common knowledge that the Soviet Union rejected first use of nuclear weapons. What criteria can be used to determine the need for our adequate actions should an aggressor resort to such weapons?

[Moiseyev] Our defensive military doctrine is based on the fact that the Soviet Union does not plan to attack anyone and that it never will be first to employ nuclear weapons under any circumstances. By the way, the United States provides for such a possibility in its doctrine.

Taking this into account, the USSR is forced to maintain the Armed Forces in that makeup and at that level which would permit them to repel any attack from without, including an attack using nuclear weapons. *We have appropriate nuclear forces and equipment possessing high combat readiness, survivability and combat capabilities which are fully sufficient to ensure that an aggressor's nuclear attack in any situation, even the most unfavorable one, is not left unpunished.*

Our actions will be adequate and—I would like to emphasize this especially—will be of a forced, retaliatory nature.

[VOYENNYY VESTNIK] In a survey devoted to the USSR, TIME wrote: "If the Soviet Union is deprived of an army and nuclear warheads, then we will be faced with a developing country." The opinion is circulating in the West that we are not competitors in the economic and scientific-technical sense. Do you believe such an assessment is completely objective? Do the Armed Forces invisibly present behind the back of our delegations contribute to success of talks or do they hinder the politicians?

[Moiseyev] We are familiar with such concoctions about the Soviet Union. This is obviously a propaganda order of those circles which are not giving up hope for a return to the "cold war" and are trying to put the brakes on the incipient process of improving Soviet-American relations. In our time it is impossible to create powerful armed forces and outfit them with the latest weapons and combat equipment without a developed economic and scientific-technical base, so the West will have to

continue to reckon with all aspects of the might of the Soviet state, whose authority in international affairs generates no doubt. This by the way also is confirmed by numerous mutually advantageous agreements concluded with the USSR essentially by all world states, including NATO countries. An overwhelming number of agreements relate specifically to the economic and scientific-technical spheres.

With respect to the influence on talks of "Armed Forces invisibly present behind the back of our delegations," our partners also cannot get by without such a "presence." Moreover, it is apparent from numerous speeches by U.S. military-political leadership representatives as well as from the NATO Council Brussels Declaration that western countries intend to continue conducting talks with us from a position of strength. We on the other hand *proceed from the assumption that it is not a policy of strength but the strength of reason, a sense of realism, realization of the need to prevent war, and the will to preserve and strengthen peace through creation of a comprehensive international security system that are the chief criteria determining success of the talks.*

[VOYENNYY VESTNIK] Views on the role and place of offensive operations have changed substantially in connection with further development of the defensive direction of Soviet military doctrine. Are the missions, content and basic principles of tactics changing in this connection?

[Moiseyev] The components of Soviet military art (strategy, operational art and tactics) are not something solidified, dogmatic and inert. They are constantly mutually developing and influencing each other. Of these three components of the military art, tactics unquestionably is its most lively part and one most subject to changes. A change in views of strategy on the correlation of the offensive and the defense dictated by the defensive direction of our doctrine does not substantially change the scope of missions of formations, units and subunits.

The content of tactics and its basic principles change with the appearance of new means and methods of warfare. Tactics brooks no stereotype or sketchiness. New principles are recognized. We will mention as an example just the convergence of methods of conducting combat operations, defeating the enemy employing nuclear as well as conventional weapons, or the principle of asymmetric threat consisting of an attempt to create such conditions in any situation that countermeasures in response to our actions would demand that the enemy expend greater time, personnel and equipment.

[VOYENNYY VESTNIK] RDT&E expenditures for creating arms and military equipment in the USSR defense budget are R13.1 billion, and in the United States they are \$37 billion. In addition, the Americans believe that they are outstripping our country in almost all of the 22 scientific-technical directions which they have singled out as priority directions for defense. Having fewer financial resources at our disposal, we

naturally must be especially thorough in choosing directions for RDT&E. Could you mention some of them?

[Moiseyev] We know quite well, of course, that the United States has not given up the idea of gaining military superiority over the USSR through a technological breakthrough. Enormous funds are being spent and significant scientific forces are being used for these purposes. In deciding questions of ensuring its defense, the Soviet Union has no intention of competing with the United States and being drawn into an exhausting arms race.

At the same time, in the interests of national security we carry on RDT&E in accordance with basic research and exploratory development programs and plans. In implementing military-technical policy, we pay special attention to priority directions in the development of arms and military equipment and to their qualitative parameters, where the creation of new structural materials and a new element base and the development of electronics and computers are key points.

I would like to note that in scientific research the Soviet Union strives neither for military superiority nor for greater security, but at the same time it also will not opt for lesser security nor will it permit anyone's superiority over it.

[VOYENNYY VESTNIK] It was clearly stated at the Congress of People's Deputies of the USSR that the Army must do its job, i.e., ensure reliable defense of the country. Does this presume a gradual reduction and then total elimination of such Army functions as highway construction, industrial and civil construction, production of food products, participation in the harvest and so on?

[Moiseyev] It is common knowledge that the USSR Constitution states: "It is the duty of the USSR Armed Forces to the people to reliably defend the socialist homeland and be in constant combat readiness guaranteeing an immediate rebuff to any aggressor." But the Soviet Armed Forces also are used to assist in accomplishing many national economic tasks not to the detriment of this very important function which they have to perform. Suffice it to mention servicemen's participation in the harvest, civil and industrial construction, laying main highways, and providing the Army and Navy with food products. And their contribution is very appreciable.

Of course, these are forced measures caused by the fact that, being part of our society and flesh of the people's flesh, the Army cannot stand aloof from accomplishing nationwide tasks at a difficult time for the country. But a trend already is being seen toward freeing the Armed Forces from participation in such matters. By decision of the USSR government, the number of military construction personnel engaged in building the projects of various ministries and departments is being reduced by 10 percent during 1989-1990.

It is necessary to dwell in particular on Army involvement in giving assistance in mopping up in the aftermath of the Chernobyl catastrophe, the earthquake in Armenia, the accident in Bashkiriya and many others. Here it is simply impossible to overstate the exploit of people in military uniform who were first at the sites of tragic events.

The need to involve the Army and Navy in accomplishing national economic tasks certainly will diminish as the Motherland overcomes economic difficulties. This will permit directing all efforts at performing the principal mission of the Armed Forces—ensuring national defense capability and protecting the Soviet people's peaceful labor.

[VOYENNY VESTNIK] Each year the majority of world countries publish "white" books and books of other color on defense issues that contain information on the structure, composition, missions and development prospects of their own armed forces. Will something similar be published for us?

[Moiseyev] Above all I would like to caution against illusions that all questions of military organizational development in the West are open and public. In fact this is far from so. Although some western countries publish all kinds of "white" books, many data are classified and not published. In particular, the financing of so-called "black programs" approved on a confidential basis as well as much other classified information is not subject to being made public.

With respect to the Soviet Armed Forces, detailed data on their structure and numerical strength are published in our mass media, including in pamphlets put out by the USSR Ministry of Defense. Comparative data on armed forces of the USSR and United States and of the Warsaw Pact and NATO have been published and defense expenditures have been revealed. We print materials on operational, combat and political training of staffs and troops. We invite foreign military observers to various exercises.

Certain data on the Soviet Armed Forces have been submitted to the United Nations, to the London Institute of Strategic Studies, and to the Stockholm International Peace Research Institute. Much information about our Army and Navy is given over Soviet radio and television. We already have taken a number of such steps which the West still has not dared take. In particular, we familiarized western specialists with a shut-down reactor which previously produced fissionable materials for nuclear weapons, and arranged for a U.S. military delegation to visit a Soviet nuclear-powered submarine and for U.S. congressmen to visit the Sary-Shagan range and other military installations.

We will continue to provide necessary information about the Soviet Armed Forces in the spirit of openness and glasnost inherent to the new political thinking. *In connection with the work of the USSR Supreme Soviet, I do not exclude the possibility of the USSR Ministry of*

*Defense submitting more detailed correlated information on Soviet Armed Forces structure, composition, missions and prospects which can be made public.*

[VOYENNY VESTNIK] Many thanks for the attention you have shown to the journal's readers.

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### Golts Reemphasizes Soviet Security Concerns

90UM0244A Moscow KRASNAYA ZVEZDA in Russian  
21 Jan 90 First Edition p 3

[Article by Aleksandr Golts, KRASNAYA ZVEZDA  
Commentator: "Why is Asia Lagging Behind?"]

[Text] Reports about events occurring on the European Continent have practically displaced information from other portions of the world on the pages of newspapers. And this can be explained: A new European society whose starting point must become the "common European home" is being born in torment before our eyes. We are not only talking about frantic changes on the eastern portion of the continent. Intense work is going on that is directed at the consolidation of security, confidence building, and freedom from fear. An example of this is the Military Doctrines Seminar that is taking place in Vienna.

But with all of the importance of events in Europe, we cannot forget that our nation's security problems are not being settled by European security. Fate has made us join together East and West of the European Continent. And it seems to me that it will be difficult to consolidate security in Europe without consolidating it in Asia at some stage. It is no accident that our Vladivostok Initiatives have the same conceptual basis as the idea of a "common European home." But if the concept of new political thinking is working at full power in the latter instance, it has still not gained adequate RPM's [revolutions per minute] in the former.

Let us face the truth: The unilateral activities of the USSR and its allies are a major portion of what is related to achievements in this area and quite justifiably so. Here we also have the elimination of more than 400 intermediate and shorter range missiles in accordance with the INF Treaty (The U.S. did not have such ground-based missiles in this region). There is also the decision to reduce troop strength in the eastern part of the nation by 200,000 servicemen, 120,000 of them in the Far East. Our forces in the MPR [Mongolian People's Republic] are also being reduced. Finally, there is the withdrawal of Soviet troops from Afghanistan. As just announced, the USSR, with the concurrence of the Vietnamese side, has begun reducing its presence at the port of Cam Ranh [Bay]. The withdrawal of MIG-23 and TU-16 aircraft from there has been implemented.

Normalization of Sino-Soviet relations occupies a special place in the list of achievements. In my view, It is vitally important in the context of military detente that

the issue of reducing armed forces in border areas to the minimum possible level be transferred to the practical plane.

However, until now, not one measure to limit military activities in the region or one confidence building measure proposed by us to the U.S. and its allies has been implemented. Moreover, negotiations have not even begun on this score. Incidentally, the fact that political processes in the Asian-Pacific Ocean region are noticeably lagging behind dynamic changes in Europe has been sensed in many capitals, for example in Tokyo, where they have begun talking about the concept of a "Broadening Balance." Obviously, this is precisely what served as one of the reasons for Prime Minister T. Kaifu's trip to the European nations. I do not dare to judge the conclusions he made for himself but unfortunately the official position did not sparkle with novelty. In his opinion, the policy of perestroika conducted by Moscow "has not found embodiment in Asia." As previously, talks are being conducted on "Soviet Expansionism."

It is strange that even some Soviet researchers analyzing this problem find the cause of foot-dragging in the fact that approaches from the past are allegedly being preserved in the USSR's policy. In particular, "attempts to achieve military parity with the U.S. in the Pacific Ocean Zone." Such suggestions also ring out even from the pages of some central newspapers. But, excuse me, the USSR is conducting a radical reduction not only of Armed Forces but also of weapons in this zone under the existing very significant American superiority in the Pacific Ocean. Air units and combat ships are being withdrawn. This is a highly original path to achieve parity!

The Pentagon is still not even thinking about reductions, at least on that scale. The impression is being formed that the cause of the unwillingness to proceed along the path of military detente in Asia is a certain confusion in the U.S. Defense Department caused by prospects of the development of the European process. The reality of armed forces and arms reductions in Europe and the introduction of a new series of confidence building measures there is also the reality of the reduction of U.S. Armed Forces combat capabilities. And during a time of "uncertainty," as the impending period is being characterized in the U.S., the Pentagon would like to preserve its capability for direct forceful pressure on the USSR. [U.S.] forces in Asia are also immune [from reductions] for this reason. As these same Americans love to say, it takes two to tango. And it is too bad that we have to wait while the comprehension develops in the U.S. that there is also a need for military detente in the East.

Of course, we are not talking about standing idly by. We are talking about how to accelerate this process. If we once again turn to the experience of Europe, we cannot help but see the positive role which the U.S.'s European Allies played in the gradual transformation of the American position. Unfortunately, not even this can be observed in Asia. The U.S.'s main strategic partner,

Japan, practically unconditionally follows Washington's lead in the sphere of military preparations. Relations with our nation markedly lag behind world trends. Tokyo asserts that the main center of contradictions is the Soviet Union's unwillingness to satisfy Japanese claims to four Kurile Islands. Because of this, they say our nations relations are also not developing.

And this, it seems to me, gave rise to yet one more series of illusions among some people in our nation. It seems that we must find some sort of mutually acceptable variation for resolution of the so-called "territorial problem" and a broad stream of Japanese technology will pour into the USSR and the Japanese will use their business skill to rapidly transform the Far East into paradise.

Of course, our countries need to settle controversial problems and conclude a peace treaty. But it is very doubtful that this will result in justifying super-hopes in the sphere of economics. Experience demonstrates that political views do not stop entrepreneurs where there is real profit. This same Japan has territorial disputes with South Korea but this is not nearly reflected in economic ties. And, on the contrary, even government encouragement cannot compel entrepreneurs to risk capital.

It surely is an illusion that a crowd of Japanese businessmen is just waiting to rush into the [Soviet] Union with super-profitable contracts for us but they say their government will not allow it. Representatives of the States of Southeast Asia, South Korea, and Taiwan besiege them with requests. And each proposes more profitable conditions for Japanese capital than their competitors'. A cheaper work force, a more developed infrastructure, tax benefits, guaranteed sales markets, etc., and so forth. And now honestly ask yourself: Do we have such capabilities at our disposal? The answer is clear.

Today the USSR needs to do everything possible to become a full-fledged and profitable economic partner of the region's states. And then the need for military detente in Asia will become obvious to them. I understand very well that it is much easier to say it than to do it. But, it seems to me, that we need to realize that we are talking not only about economic benefits but also about our state's security.

At the present time, the shortest route to mutual understanding in Asia and afterward also to cooperation lies through joint efforts to settle regional conflicts.

The search for common approaches is occurring right now with regard to the Cambodian problem. A threat once again hangs over this long-suffering country. Having taken advantage of the withdrawal of Vietnamese volunteer troops, the armed opposition is undertaking massive attempts to seize power through military force. A furious offensive has been undertaken against Battambang, the second largest city in the nation. Judging by everything, the military situation in Cambodia is quite complicated.

But the possibility of a return to power by the gruesome regime of murderers—the Pol Pot forces (and it is precisely the Pol Pot forces that make up the opposition's main combat force) is forcing Western nations to change their approaches. If ideological blinders previously compelled a number of states to refuse to cooperate with the Hun Sen Government that was branded "communist," now the situation has changed. British parliamentarians and American senators are appealing to their governments and demanding a cessation to even indirect support to the Pol Pot forces. And the President of France issued a sensational statement that no compromise of any sort is possible with this group.

Even Australia has become involved in resolving the Cambodian matter by advancing a quite promising plan for a peaceful resolution. It proposes establishment of an interim administration in the country under U.N. control until free elections are conducted. Thailand also put forward an interesting proposal—a gradual solution to the problem: Creation of an international control mechanism, procedures for terminating combat operations, and cessation of foreign military aid. The Soviet Union considers it necessary to introduce a moratorium on deliveries of weapons to all opposing parties. Finally, Indonesia announced its readiness to conduct yet another informal meeting with the participation of all interested parties. The fact that the USSR and the PRC have a common understanding of the importance of the role of the U.N. in the settlement of this problem at the present time was an important factor. Rough drafts appeared on how to resolve the situation.

Of course, a Cambodian settlement is a very important but nevertheless individual case from the point of view of a common position in the Asian-Pacific Ocean region. But a consensus of Asian States is being created precisely in this direction. And it is very important in my opinion.

This example is evidence that there are no complex problems which cannot be resolved. The main thing is a common vested interest. This is what permits us to hope that today a new medium is being created that will permit any specific issues to be peacefully resolved precisely in this direction and despite foot-dragging.

### Critique of Arbatov on Sufficiency

90UM0448A Moscow LITERATURNAYA ROSSIYA  
in Russian No 12, 23 March 90 p 17

[Open letter to Academician G.A. Arbatov from Major General German Kirilenko, doctor of military science: "What To Consider Reasonable, What, Sufficient?"]

[Text] I was present at the Second Congress of People's Deputies on the very day that General of the Army M.A. Moiseyev, chief of the USSR Armed Forces General Staff, and Academician G.A. Arbatov, director of the USSR Academy of Sciences United States and Canada Institute, spoke.

This combination promised an interesting exchange of opinions between the military and politicians on the current processes occurring in the country and the world.

High professionalism is always valued, and for this reason I waited, following General of the Army M.A. Moiseyev's speech, with perfectly understandable interest to hear what Academician G.A. Arbatov would say about current foreign policy problems.

But, unfortunately, Georgiy Arkadyevich chose the currently fashionable topic which military science attributes to the sphere of the theory of military economics and the organizational development of the armed forces.

Naturally, I began to listen to his speech with roughly the same interest and attention with which he would have listened to mine, had I been speaking on foreign policy problems of the United States and Canada.

The contentiousness and inadequate reasoning of his opinions seemed to me even at that time dangerous to the extent that the deputies and readers might take them to be truth available to a well-known academician.

When, however, in issue No. 5 of the journal OGONEK Georgiy Arkadyevich continued the subject he had begun at the congress and which, probably, had pleased him, I considered it my duty to object, and this is my printed speech—an open letter to Academician Arbatov.

First, concerning the main statements made from the congress rostrum.

1. "No developed state in the world currently spends on military outlays, as we do, more than 9 percent of its GNP."

First, this is not the case. There are countries—Israel, for example—that spend a greater proportion. Second, the USSR does not fit into the category of the countries you name. Third, I would specify that in 1989 the proportion of the USSR's military spending in GNP constituted not 9 but 8.4 percent, and in 1990 will constitute no more than 7.7 percent. Fourth and finally, since our GNP is half America's (and you know this), the proportion of military spending to maintain parity should have been twice as high, but was higher by a factor of less than 1.5. In the United States, 5.9 percent, with us, 8.4 percent. As a result we maintain parity mainly thanks to servicemen's low pay.

2. The most burdensome manifestation and legacy of stagnation is the complete freedom of the military and military industry."

First, not all that proper. Second, your viewpoint is very similar to America's. This was precisely what the United States and Canada thought: the military governs policy here, not the other way about. But if you believe that Khrushchev, Brezhnev, and Chernenko were military, who, in that case, was a politician?

3. Even given a cut of 500,000 in our Armed Forces, they "remain 1.5 million more than America's."

There were some 3.289 million men in the U.S. Armed Forces in 1989. This number included 2.13 million regular forces and 1.159 million men in the organized reserve (the National Guard and reserves of branches of the service).

The military equipment strength level of the formations of the organized reserve constitutes 80-85 percent, and the readiness to conduct combat operations, from 3 to 10 days.

The overall numbers of the USSR Armed Forces as of 1 January 1990 constituted 3.993 million.

Without giving away any secrets, I can assure you (and the Americans know this) that our Armed Forces (I stress, armed, that is, constantly engaged in combat training, and not in economic activity) are no greater than America's by a single soldier.

4. "We share the doubtful fame of being the biggest dealers in arms and military equipment. Military extravagance has literally bled our economy white."

According to foreign estimates, in which you place full confidence, arms exports are a most profitable item in Soviet foreign trade. They provide the country with up to 15 percent of all proceeds in hard currency (oil sales, 60 percent). Such "extravagance" could hardly bleed our economy white. Of course, we could forgo both the "doubtful fame" and the "proceeds in hard currency," only let it not be thought that other countries would follow our example.

And now about your notes in the journal OGONEK "in continuation, as it were, of the speech" at the congress.

You write that "military force should be 'reasonably sufficient'—no more, no less."

But how much is this? Why do you not venture to bestow a numerical indicator on this "reasonable sufficiency," which is very reminiscent of the proposition that "the economy must be economical."

As a participant in the Great Patriotic War and proceeding from experience in it, try to define in what defensive operation such "sufficiency" was created. At Kiev, Odessa, Sevastopol? No? At Kursk, then? I think so too. But let us recall that such "sufficiency" was achieved given the considerable superiority of our forces. And this under conditions where we were not inferior to the enemy in quality of arms and military equipment. F. Engels observed that "the advantage in a military respect is gained by the country with a higher level of civilization over its less developed neighbors."

Can we today state that we have such an advantage over the United States or other NATO countries? You, obviously, know this full well. Nonetheless, I will adduce in this connection the following fact. Whereas in the 1950's

our country was in third place in the world in terms of the youth intellectualization factor, in 1985 we were 42d, and by 1987, 57th.

You are worried by the fact that we have more tanks than the United States. Excuse me, but I am forced to remind you that we also have more tractors and combines, as workers also, in agriculture (in the United States, three million persons, but with us, 23 million), but for some reason or other we obtain less grain and meat. Think about reasonable "sufficiency."

I hope you will not maintain that our tanks are in terms of quality, as distinct from the tractors, better than America's, and that soldiers of the construction battalions are not inferior in level of combat training to the U.S. National Guard?

In that case, I would make so bold as to assure you that you are mistaken and are deluding the readers.

As far as the numbers of the Armed Forces of the United States and the USSR are concerned, I would like to call your attention to the following circumstances also.

First, the geographical distance of the territory of the United States from possible theaters of war and the existence there of land borders with Canada and Mexico do not condition the numbers of the Armed Forces which it has.

Second, it should be considered that in the U.S. Army soldiers are not enlisted even in such chores as kitchen duty but that our Armed Forces not only cater 20-40 percent for their own food requirements but also participate actively in the accomplishment of such large-scale national economic tasks as "Housing 2000" and "Roads of the Non-Chernozem," reclamation, the annual harvesting and much more.

If, following your counsel, we continue to reduce the army, to whom will we entrust these concerns? "General" arguments are not worth a cent if there is no answer to difficult questions here.

Third, having "served" in the U.S. Army, the journalist Artem Borovik told us in the journal OGONEK that the Americans believe one soldier of the U.S. professional army is worth three nonprofessionals. I have no reason to distrust the American estimates. But in this case with what numbers, in your opinion, might we ensure our "reasonable defensive sufficiency"?

I do not understand why, in taking issue with your opponents (S.F. Akhromeyev and A.I. Ovchinnikov) concerning the numbers of the Armed Forces of the Warsaw Pact and NATO countries, you resort as a principal argument to official American data and completely ignore our official information, although it has been published in the open press for several years now.

Together with this I am amazed at your euphoria in connection with the 10-percent reduction in U.S. military appropriations over five years (with regard for

inflation) and your readiness "to answer fully for official U.S. statistics." I would in this case like to remind you that just last year alone the USSR reduced its defense spending 8.2 percent without taking inflation into account, but were we to count, as you propose, "scientifically, in real prices, with an adjustment for inflation," this indicator would be considerably higher than America's. It should also be considered that not only do I have sufficient reason to treat American statistics with a certain caution. Such caution is shared by PRAVDA correspondent V. Gan, who has reported that although certain cuts in the Pentagon are planned, "these are all merely 'fat-cutting.'" All the Pentagon's main programs have been left untouched. The White House is seeking an increase to \$4.8 billion in appropriations for SDI, supporting the acquisition of Stealth bombers and new submarines and fighters and so forth.

This is the situation in reality.

Much-esteemed Georgiy Arkadyevich, I could continue the polemic in respect of other of your arguments also, but I would like also to agree with you that the other side's intentions need to be judged not so much by its words as its possibilities. After all, it is sufficiently obvious that the danger of war persists in the world, that the by no means defensive doctrines and concepts of the United States and NATO remain in effect and that they have multimillion-strong armies and multibillion-dollar military budgets. It was no accident that this was dealt with at the CPSU Central Committee February (1990) Plenum, and it was stressed that we need well-trained and equipped armed forces. And it is necessary to pay for quality no less than for quantity.

The country's defense currently costs R70.9 billion. You write that this amount passes beyond the framework of reasonable sufficiency. I would be interested to know your opinion as to by how much. If it is borne in mind that at the present time over 173,000 families of servicemen are in need of apartments and that the official salary of even a regiment commander is not more than that of a municipal bus driver. As far, however, as the quality of the arms and military equipment is concerned, I hope you will understand that there is no basis with us for economizing here. Reports on accidents on submarines and in aircraft are graphic testimony to the amoral nature of such proposals.

Of course, considering the present socioeconomic conditions, R70 billion is a substantial sum. However, let us take a closer look: Is it that ruinous for our country?

According to information presented in the Supreme Soviet on 3 June 1989 by P. Mostov, chairman of the State Committee for Material and Technical Supply, half of the industrial product is lost in the country annually—this loss amounting to R450 billion.

According to figures adduced in their official speeches by M.S. Gorbachev and N.I. Ryzhkov, there is an annual loss of agricultural products to the extent of 20-40 percent, which constitutes a loss within the R47-95 billion range.

Losses of work time (USSR Academy of Sciences figures) are put at 30 percent or R83 billion.

A summary estimate, however, made on the basis of testimony of F. Fedorov, leader of a working group of the USSR Supreme Soviet studying the problem of unproductive losses, shows from far-from-complete data that total unproductive expenditure and losses in the national economy are put within the R580-629 billion range.

Together with this the USSR Procuracy reports that criminal capital in the country is the equivalent of R210-240 billion (and according to other sources, considerably more!). One-third of this sum (as much as the country allocates annually for its defense) participates in the "shadow economy."

Should not this potential be employed primarily for the solution of our socioeconomic problems? You will agree that against the background only of the said unproductive losses even the money allocated to the country's defense appears more than modest. Is it only expenditure on the army that is "rocking" the country's economy?

I would like in conclusion to express the hope that the vogue for the indiscriminate blackening of the Army and attendant subjects will pass. The more so when it is obvious to everyone that there is an urgent need for the enhanced prestige of Army service, the professionalism of servicemen, and military reform. M.S. Gorbachev's report at the CPSU Central Committee February (1990) Plenum observed that coverage in the mass media of Army and Navy life "should be truthful and respectful in respect of the Soviet Army and soldiers' and officers' military affairs." Anti-Army propaganda has never been popular among our people. But it was heard, unfortunately, distinctly enough in your speech at the Second Congress of USSR People's Deputies and in OGONEK.

It was this that prompted me to address an open letter to you through LITERATURNAYA ROSSIYA.

Respectfully,  
[Signed] Major General German Kirilenko, doctor of military sciences.

**Impact of Reforms on GDR Armed Forces**

90UM0289A Moscow KRASNAYA ZVEZDA in Russian  
4 Feb 90 First Edition p 3

[Interview with Major General H. Unterörfel, Army, Navy, and Air Force attaché at GDR Embassy, USSR, by KRASNAYA ZVEZDA correspondent Captain M. Zheglov; date, place, and occasion not given; first paragraph is KRASNAYA ZVEZDA introduction]

[Text] The first question to be asked was not of an official nature. Before the interview we received a report from the GDR to the effect that the National People's Army has rescinded the requirement to use the term "comrade" as the form of address, substituting the word "Gospodin." Would this innovation pertain to everyone? Officers who are members of the SED-SDP, for example? As subsequently ascertained, there are no exceptions. This is unusual, but it must become customary to do so. And so, the interview.

[KRASNAYA ZVEZDA] Gospodin Major General, we are following closely the development of the situation in the GDR. We are aware that the country is experiencing a difficult period. It is true that difficult processes are taking place in the Army as well as society?

[Unterdörfel] Indeed they are. The democratic revolution occurring in the republic is proceeding from the bottom to the top. These changes have not bypassed the Army, since we always considered ourselves to be part of society and the people. It would be strange if the GDR NPA did not participate in this social change. The Armed Forces are discharging their constitutional duty, subordinating themselves, as officially approved, to only the country's Parliament—the People's Chamber—and to the executive organ, which is the government. The point is that the present-day conditions are such that the Army is functioning not in the interests of any political party or social organization, but for all classes and social strata of the GDR.

Changes such as those above have given rise to the pressing need to review the GDR's military doctrine and carry out reforms within the Armed Forces. At a seminar held in Vienna, the chief of the Main Staff, GDR NPA, outlined the major tenets of the military doctrine, which are responsive to the requirements brought forth by the revolutionary processes occurring in the republic. The doctrine's draft bill is being submitted to the People's Chamber for consideration. In addition, the country's defense minister has issued an order calling for the organization of 16 working groups for the express purpose of drawing up major principles for reorganizing the Armed Forces.

[KRASNAYA ZVEZDA] Does this reorganization have any provision for reducing the size of the GDR NPA?

[Unterdörfel] It certainly does. We intend to show in this manner that the country's security can be assured with a smaller number of forces, now that the Army has made the change to the new defensive structure. Also, the

shortening of the term of compulsory service from 18 to 12 months has led to the discharge of 26,000 men from the NPA. Also in progress is reworking of problems of the management apparatus, primarily size of the latter.

[KRASNAYA ZVEZDA] In this regard, what functions will be assigned to the Army's political apparatus?

[Unterdörfel] As you know, political-educational work was previously carried out in our Armed Forces. However, this is no longer possible, since, as I have said, we are performing only constitutional tasks. Hence the need for structural reorganization of the political organs.

[KRASNAYA ZVEZDA] Does this mean that the NPA Main Political Directorate will pass out of existence?

[Unterdörfel] In the sense of carrying out its previous functions, yes.

[KRASNAYA ZVEZDA] In that case, what will take its place?

[Unterdörfel] A State-Citizens' Work Directorate that will be set up. Its chief will no longer be a deputy defense minister. By the same token, there no longer will be any deputy commanders for political affairs.

[KRASNAYA ZVEZDA] With what responsibilities will the Directorate be charged?

[Unterdörfel] First and foremost, it will carry out work of an interpretation nature. That is, we are to explain to the soldier that he is doing his duty for the people, defending peaceful labor of all society, independently of any political party, being guided only by the program stipulated by the coalition government. In addition, the Directorate will perform psychological work among GDR NPA personnel.

[KRASNAYA ZVEZDA] Will the Army be devoid of political influence?

[Unterdörfel] No. Political influence will be exerted by means of the State-Citizens' Work Directorate, in consonance with the government's policy. In principle, it would have been possible to set up organizations of other parties in the Armed Forces, along with SED-SDP organizations. This would not be feasible, however. On what basis, with what justification, could this be done? Therefore, in accordance with the changes made in the GDR Constitution, we proposed—and the People's Chamber approved—that the SED-SDP leave the Army. Servicemen that are party members are presently forming their own organizations at their place of residence. In this connection, we proceeded from the concept that it is permissible to form at the place of residence mixed party organizations as well as party organizations for servicemen only. That depends on their number. Let me say once again that there no longer will be any in the Army.

[KRASNAYA ZVEZDA] The borders between the GDR and the FRG and West Berlin are presently open. Do NPA servicemen visit West German and West Berlin territory?

[Unterdörfel] Every serviceman carries a general citizen's passport. He may wear civilian clothes while on leave. He is permitted to leave the confines of his post and travel on his own time not only to any settlement in the GDR, but also abroad. He is required to merely inform his commander that he is to take leave—in West Berlin, for example.

[KRASNAYA ZVEZDA] What is done in this regard to maintain security of state and military secrets?

[Unterdörfel] Once again this is a matter of servicemen's conscience. A soldier is a citizen of his country. He is an adult, an educated person; he can determine for himself what he should say and to whom. This is how to gain trust in people. Fundamental restructuring of thinking is needed here, of course. At first there was much resistance to changes such as this. However, if one takes a closer look, he sees that we are proceeding in the proper direction. Take the case of television. In past years party members were forbidden to watch Western programs. Many officers would ask: "What is going on? At all

meetings we are told about trust, but when it comes down to business, that is a different story. And all GDR citizens are able to watch any program they choose." I am sure that persons who travel to the FRG know where they are headed and remember their duty.

[KRASNAYA ZVEZDA] It is possible to cite many examples where the FRG has intruded directly into the GDR's internal affairs. Can it be assumed that this also concerns the republic's Armed Forces?

[Unterdörfel] That is the problem of problems. Many people in West Germany are attempting to obtain political dividends by taking advantage of events occurring in our country, of course. Attempts are being made to create chaos in the GDR's social and political life. Unfortunately, extreme rightist elements have come to life. As far as I know, there have been no cases of disseminating neo-Nazi literature or attempts to exert political influence on our servicemen. However, I am sure that there will be. Especially now that the new generation is entering the Army. There are proponents of neo-Nazi ideas among young people. That is why much depends here on the effectiveness of state-citizens' work. It is important that officers act deliberately to explain to their subordinates the nature of neo-nazism and for what it stands.

**New Assignment, Biography: Maj Gen Domashev**  
*90UM0282B Moscow KOMMUNIST*  
*VOORUZHENNYKH SIL in Russian No 21, Nov 1989*  
(signed to press 2 Nov 89) p 90

[Biographic information on Maj Gen Nikolay Stepanovich Domashev, appointed military council member and chief of the Political Directorate of the Northern Group of Forces]

[Text] Born on 5 January 1935 in the village of Nizhnyaya-Medveditsa, Streletskiy Rayon in Kursk Oblast in a peasant family. His father was a disabled veteran of the Great Patriotic War.

In 1953, he completed the Verkhnyaya Medveditsa Secondary School and was admitted to the Ulyanovsk Military Signals School imeni G.K. Ordzhonikidze. After completing the school, he served in the Moscow, Leningrad, Baltic, Far Eastern and Odessa Military Districts and twice in the Group of Soviet Forces in Germany (now the Western Group of Forces). His first officer position was a signals chief of a tank battalion and later the commander of a radio platoon and deputy commander of a telegraph-telephone company.

Since January 1961, he was in Komsomol work. Initially, he was secretary of the Komsomol bureau of the signals battalion and later the secretary of the Komsomol committee of a signals regiment and assistant chief of the unit political department for Komsomol work. In 1966, he was appointed propagandist of a tank regiment. Later he was the propagandist of the political section of a tank division and deputy commander of the tank regiment for political affairs. In the following four years, he was the unit chief of the political department, for four years the chief of the political department of a motorized rifle division and another four years as the chief of the corps political department, and for two years, military council member and chief of the army political department.

Further service: first deputy chief of the Political Directorate of the Odessa Military District and deputy chief of the Directorate for Party Organizational Work and chief of the Inspectorate (for political bodies) of the Main Political Directorate of the Soviet Army and Navy.

In 1967, he completed the history faculty of the Moscow Municipal Correspondence Pedagogical Institute. In 1976, he completed the Military Political Academy imeni V.I. Lenin. At this academy in 1987, he underwent training in academy courses for the retraining and advanced training of leadership personnel.

He is a Russian. He was admitted to the ranks of the CPSU in 1958. He was elected a member of a number of the CPSU gorkoms and a deputy of municipal soviets. A delegate to the 25th CPSU Congress.

For successes achieved in military and political training, for the maintaining of high combat readiness and for the mastery of difficult combat equipment, he has been awarded the orders For Service to the Motherland in the

USSR Armed Forces Second Degree (1985) and Third Degree (1979) as well as many medals.

He received the rank of major general in December 1982.

Married in 1957. His wife is Russian and completed a pedagogical institute.

**Notes on Biography  
(From Responses of Fellow Servicemen)**

"By nature is calm. Honest and just. In dealings with others is tactful, courteous and amiable."

"A promising officer. Fond of military service."

"Shows sensitivity for others, is concerned in resolving needs of subordinates and combines concern with great exactingness."

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**New Assignment, Biography: Lt Gen A.I. Zakharov**

*90UM0282C Moscow KOMMUNIST*  
*VOORUZHENNYKH SIL in Russian No 21, Nov 1989*  
(signed to press 2 Nov 89) p 91

[Biographic information on Lt Gen Aleksandr Imamety-dinovich Zakharov, appointed military council member and chief of the Political Directorate of the Red Banner Turkestan Military District]

[Text] Born on 13 April 1938, in Kuybyshev, in a white-collar family and his father was the director of a MTS [machine-tractor station]. He began his job career immediately after completing secondary school at one of the enterprises in Kuybyshev as an apprentice milling machine operator, rising to a specialist 4th category. Simultaneously, he studied in the evening worker-youth school. Having completed it, he was admitted to the Engels Military-Technical School of the National Air Defense Troops.

After completing the school, he was a senior technician and then the secretary of a Komsomol organization of an antiaircraft artillery battalion, and assistant chief of the political department for Komsomol work in the unit and formation, senior instructor for the department of Komsomol work of the Political Directorate of the Red Banner Urals Military District. From this position he was appointed deputy chief of the political department of a motorized rifle division and two years later, chief of the unit political department. He has also been the chief of a political section of a motorized rifle and tank divisions, first deputy chief of the political department of an army and later the military council member and chief of the Political Department of the Limited Contingent of Soviet Troops in Afghanistan and first deputy chief of the Political Directorate of the Red Banner Turkestan Military District.

In 1970, he completed the Military Political Academy imeni V.I. Lenin, and twice at this academy underwent instruction in academy courses for retraining and advanced training of the command personnel.

A tatar. Member of the CPSU since 1959. He was a delegate at the 27th CPSU Congress and elected a member of the CPSU gorkom.

He has received four orders: in 1988, for successfully executing a mission in providing international aid to the republic of Afghanistan with the Order of the Red Banner; the orders For Service to the Motherland in the USSR Armed Forces 2d Degree (1978) and 3d Degree (1975) and the Order of Merit (1983) for successes in military and political training and for mastering complex combat equipment.

He received the rank of major general in 1987 and lieutenant general in 1989.

Married in 1963. His wife completed the Urals State University. They have a daughter.

Lines for Biography (From Responses of Fellow Servicemen)

"He thinks creatively and logically. He sets out his thoughts clearly both verbally and in writing. He has a good notion of the nature of modern combat and can effectively organize and conduct party political work in various types of a combat situation."

"While in a difficult situation and in other conditions involving peril to his life, showed great self-possession and courage and the ability to take effective, proper decisions."

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New Assignment, Biography: Col Gen V.A. Patrikeyev

90UM0282D Moscow KOMMUNIST  
VOORUZHENNYKH SIL in Russian No 21, Nov 1989  
(signed to press 2 Nov 89) p 92

[Biographic information on Col Gen Valeriy Anisimovich Patrikeyev, appointed commander of the Red Banner Transcaucasus Military District]

[Text] Born on 24 October 1938 in the village of Bogolyubovo, Staro-Yuyevskiy Rayon in Tambov Oblast. After the death of his father, he was raised by his mother, a rural teacher, along with a brother and sister. In 1955, he completed the Novikovo Secondary School in Staro-Yuyevskiy Rayon and was then admitted to the Tambov Military School imeni MSU B.M. Shaposhnikov. Two years later, he was transferred to the Poltava Military School imeni Rabochikh Krasnogo Zamoskvorechya which he completed in 1958.

He began his officer service in the Kiev Military District as the commander of a rifle platoon and was later the

deputy commander and commander of a rifle company. Later came study in the Military Academy imeni M.V. Frunze. He completed it in 1967 with a gold medal.

After the academy came service in the Group of Soviet Forces in Germany (presently, the Western Group of Forces): commander of a motorized rifle battalion, deputy commander and commander of a motorized rifle regiment. Upon relief he was appointed to the Order of Lenin Leningrad Military District as commander of a motorized rifle division. From this position in 1975 he was admitted to the Military Academy of the General Staff of the USSR Armed Forces imeni K.Ye. Voroshilov. He completed the academy with a gold medal and received an appointment to command an army corps. Subsequently, he was the commander of a combined-arms army and chief of staff of the Red Banner Far Eastern Military District and commander of the Red Banner Volga Military District.

A Russian. He was admitted to the ranks of the CPSU in 1963 while serving as a company commander. He has been elected the member of the buro of a number of city, oblast and kray CPSU committees and deputy of the oblast and kray soviets.

For successes in military and political training and for the mastery of new complex military equipment, he has been awarded the Orders of the Red Star (1989), for service to the motherland in the USSR Armed Forces 3d Degree (1975) and numerous medals.

Ranks awarded: colonel in 1973 ahead of time and major general in 1975. Rank of colonel general received in 1985.

Married in 1960. His wife is a librarian. The family includes a son and daughter. The son is serving in the Baltic Military District as a battalion chief of staff, while the daughter is studying in Kuybyshev State University.

Lines for a Biography  
(From Responses of Fellow Servicemen)

"Showed himself to be disciplined, restrained, intelligent, efficient and demanding of himself.... Correctly understands a difficult tactical situation. Strong during marches."

"Self-critical in assessing his own work, heeds the opinion of the communists of the party organization and possesses the ability to lead a collective to solve complex problems."

"Is organized and demanding in work.... Shows concern for subordinates and takes an interest in their needs and requests."

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**New Assignment, Biography: Col Gen I.N. Rodionov**

*90UM0282E Moscow KOMMUNIST  
VOORUZHENNYKH SIL in Russian No 21, Nov 1989  
(signed to press 2 Nov 89) p 93*

[Biographic information on Col Gen Igor Nikolayevich Rodionov, appointed chief of the Military Academy of the General Staff of the USSR Armed Forces imeni K.Ye. Voroshilov]

[Text] Born on 1 December 1936 in the village of Kurakino, Serdobskiy Rayon in Penza Oblast in a white-collar family. In 1944, he went to study in a rural school while two years later the family moved to the town of Mukachevo, to the place his officer was serving—then an officer in the Red Army and a participant in the Great Patriotic War—where he continued his studies in the urban secondary school which he finished in 1954. During the same year, he successfully passed the entrance exams for the Orel Tank School imeni M.V. Frunze. After completing it in 1957, he was sent to serve in the Group of Soviet Forces in Germany (now the Western Group of Forces). For almost six years, he was in command of a tank platoon and for 18 months a tank company. Upon relief, he was sent to the Order of Lenin Moscow Military District in the same position. Later, he became the deputy commander of a tank battalion. From here he was admitted to the Military Academy of the Armored Troops imeni MSU R.Ya. Malinovskiy. He completed it in 1970 with a gold medal. He was sent to the Carpathian Military District as the commander of a motorized rifle regiment. He later became the deputy commander and commander of a motorized rifle division.

In 1978, he was admitted to the Military Academy of the General Staff of the USSR Armed Forces imeni K.Ye. Voroshilov. He completed the academy with honors in 1980. He was appointed to the position of commander of an army corps and later became the commander of a combined-arms army. For a year, he was in command of the Limited Contingent of Soviet Troops in the Republic of Afghanistan. He was the first deputy commander of the Order of Lenin Moscow Military District and for more than a year, the commander of the Red Banner Transcaucasus Military District.

A Russian. Member of the CPSU since 1956. He was elected a member of the CPSU kraykom and was the deputy of the kray and oblast soviets and on 26 March 1989, was elected the USSR People's Deputy from the Borzhomi Territorial District of Georgia.

He has been awarded three orders: for the successful carrying out of the assignment to provide international aid to the Republic of Afghanistan, the Order of the Red Banner (1986), for successes in military and political training and for the mastery of new complicated military equipment, two Orders for Service to the Motherland in the USSR Armed Forces 2d Degree (1978) and 3d Degree (1975) as well as many medals.

Ranks awarded: colonel in 1975 ahead of time, major general in 1977. He received the rank of colonel general in October 1988.

Married in 1959. His wife is an Ukrainian and by education a production engineer. The son is serving in the naval infantry in the Pacific Fleet and is a captain.

**Lines for a Biography  
(From the Responses of Fellow Servicemen)**

"Outstanding abilities. Energetic. Enterprising in work."

"Carries out party assignments conscientiously.... In dealings with others, is courteous and tactful. Is modest in his everyday life. Exacting and just."

"Possesses good volitional qualities, is an organized, decisive and disciplined leader."

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**Recall of Prior Serviceman to Active Duty**

*90UM0252A Moscow SOTSIALISTICHESKAYA  
ZAKONNOST in Russian No. 7, 1989 pp 45-46*

[Article by I. Zotov: "Not Considering His Desires" or "Considering His Unwillingness"]

[Text] Just recently questions of military development were quite secret and not open to discussion. But the times are changing, and after breaking from the offices of the prestigious department to the pages of the central press, these problems have become public property, and are starting to be resolved.

By ukase of the USSR Presidium of the Supreme Soviet dated 10 April 1989, changes were made to the USSR "Universal Military Obligation" Law. A most urgent question, student conscription, was resolved.

In accordance with another ukase, dated 21 March 1989, 500 thousand service members will return to their peaceful concerns. And among them those whose choice of profession was, bluntly speaking, not very free. As for example, Aleksandr V., who wrote to the editors...

There was nothing especially remarkable in the fate of Aleksandr. He was born in 1961. After graduation from high school he went to an industrial technical school. In the spring of 1981 he was drafted to active military service. As required, after two years he returned, truly believing that he had done his honorable duty as a Soviet citizen.

In 1983 he became a student at a polytechnical institute. He married.

The year 1988 promised long-awaited, exciting changes. Defense of his draft thesis and state examinations would conclude his carefree student years, and a probably somewhat tiresome dietetic existence from stipend to stipend.

Work placements were coming up, and quite possibly, interesting work. The possibility of finally standing on his own two feet, feeling himself a true head of a family, a breadwinner, became increasingly real. Soon after he received his graduating diploma, he marked another no less remarkable event, the birth of his first-born.

As you know, life makes its corrections to our plans. Not all dreams are fated to come true. On 17 July 1988, a daughter was born to the family of the brand new young specialist Aleksandr V. And four days after that...

### Not Considering His Desires

From Aleksandr V.'s letter to the editors:

"On 21 July 1988 I was served notice that I had been drafted to the ranks of the USSR Armed Forces for two years.

My wife, and indeed everyone who knows me, were bewildered. They asked questions: 'Why are they calling you up again. Didn't you already serve? What about the work placements when you graduate from the institute?'

I myself immediately began to look for the answer. First I asked the rayon military commissariat. In response I heard that this was the order of the USSR Ministry of Defense. And if I "didn't go along with it", there would be unpleasantness...

I appealed to the military procuracy, where they told me that if I had been called up by order of the USSR Ministry of Defense, I would have to address my questions to them. I also appealed to the oblast military commissariat. But still I didn't get a convincing answer.

After this 'run' for answers, I received all the corresponding documents in the rayon military commissariat... and I am now serving.

At my unit they were also surprised that I had served already and have been recalled to service, this time as a lieutenant."

Every year, after serving their required time first in the Armed Forces and then in military science departments, thousands of graduates of the daytime divisions of many of the country's VUZ' replenish the ranks of reserve officers. And probably there are few who suspect the real possibility of experiencing what happened to Aleksandr V.

And you must agree, his fate was not an enviable one. Owing everyone, never living up to the hopes of the enterprise where he was finally supposed to begin his working life, he left his young wife at a crucial and difficult time for the family. Even if it was against his will—that didn't make it any easier! What sort of defender can the man make, when raising the combat readiness of the platoon assigned to him is the least of his concerns?! And what sort of order is this, bridging the demographic gap at the expense of those who themselves are in need of defense, a mother and baby?

### Considering His Unwillingness

From the response of a department chief of the Main Personnel Directorate of the USSR Ministry of Defense, Yu. Rodionov:

"The USSR's 'Universal Military Obligation' Law does not forbid a second conscription to active military duty for 2-3 years to officer positions for persons with prior compulsory military service as soldiers, seamen, sergeants, or petty officers who subsequently become reserve officers.

Therefore the applicant has been legally drafted again.

However, considering his unwillingness to perform military service again, and the upcoming reduction in the strength of the USSR Armed Forces, he will be discharged to the reserve ahead of time in the reduction of strength levels."

So it turns out that it was all legal, since it wasn't forbidden. And thus it cannot be ruled out that some other young man not yet thirty, wearing officer's shoulder boards, with two (or three) years of service as an enlisted man already behind him, will take Aleksandr's place.

Speaking of the Law, it's worth while to note another interesting detail. Repeat conscription (to active, extended service) is also possible for soldiers, seamen, sergeants, and petty officers (art. 39). Service members and those with military obligations who do not have officer rank are accepted for active military service as warrant officers of the USSR Armed Forces (art. 57). But all solely on a voluntary basis. Only individuals of the officer reserve can be picked in peacetime for active military service (including for a second time) on a voluntary-compulsory basis: voluntarily, by decision of the USSR Ministry of Defense; by conscription, for two-three years from among individuals aged not more than 30 years, in numbers and military specialties chosen by the USSR Council of Ministers (art. 66).

And what is the result of this? The voluntary-compulsory approach resolves the problem of quantity, but not of quality of our Armed Forces. Individuals whom you can't term anything but accidents continue to wind up in the Army.

Generally, however, the person receiving a notice has no choice. Article 80 of the RSFSR Criminal Code, which says that "avoidance of a regularly scheduled conscription to active military service is punished by imprisonment for a period of one year to three years," can cool even the hottest heads. Reasons such as those of Aleksandr V. are not recognized by the "Universal Military Obligation" Law. No special desire to perform service yet again is required, for today we still have a system in which the person, his interests, needs, and abilities either do not figure at all, or appear juxtaposed with the phrase "considering his unwillingness."

And this is why there is no guarantee that after the next conscription the editors won't receive a letter bearing a military postal service stamp. And in this letter, fallen hopes, reflections on humanity and justice, and a question that for Aleksandr V. remained unanswered: "The way it turns out, to keep from being redrafted for two years, this time as a lieutenant, all you have to do is just never go to a VUZ. So that you don't have any problems..."

Apparently, there's only one thing you can do with such legal vulnerability: hope for the best, but prepare for the worst. Even if this "worst" entails a clear violation of social equality—some, not having served a day, graduate from a VUZ with a military science department and get safely certified as reserve officers without performing active duty. And others will do their honorable duty for themselves and for 'the other guy' (who simply had better luck).

The decision to reduce the strength of the USSR Armed Forces, let us hope, will return to peacetime concerns the individual who has already honorably performed his honorable duty. I believe this reasonable solution will not do tangible harm to our Armed Forces.

But the problem remains. What is more, the ukase of the Presidium of the USSR Supreme Soviet of 10 April 1989 unintentionally exacerbates it.

You see, according to the changes introduced to the Law of Universal Military Obligation, graduates of institutes where there are departments of military science (and this is most VUZ') now are certified into the reserve office component without performing active military service. And as the Deputy Chief of the General Staff of the USSR Armed Forces, Col Gen G. Krivosheyev, reported in an *IZVESTIYA* interview, only 2-4 percent of the annual number of reserve-officer graduates are actually drafted into the Army. That being the case, is it fair for there to be a voluntary-compulsive second conscription?

Clearly it is time for our military department to think on this matter and, most importantly, to resolve it. A person who has honorably done his military duty should have the right to chose his subsequent path in life. A right protected by law.

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#### Changes to Law on Pensions

90UM0252B Moscow SOBRANIYE POSTANOVLENIY PRAVITELSTVA SOYUZA SOVETSKIKH SOTSIALISTICHESKIKH RESPUBLIK in Russian No 30, 1989 pp 737-738

[Decree of the USSR Council of Ministers, Art. 132, dated 21 August 1989: "On Improvement of Pension Support for Certain Categories..."]

[Text] Decree of the USSR Council of Ministers

On improvement of pension support for certain categories of individuals of officer personnel, Army and Navy warrant officers, and extended-service personnel, individuals of the command and enlisted personnel of the organs of internal affairs, and members of their families.

In connection with the USSR Law "On urgent measures to improve pension support and social services to the population", the USSR Council of Ministers decrees:

1. That pensions for years in service designated for officer personnel, Army and Navy warrant officers, extended-service personnel, and command and enlisted personnel of the organs of internal affairs who have become invalids due to wounds, concussions, or disabling injuries received in defense of the USSR or in performance of other duties of military service (service duties), or due to illness associated with time served at the front, be raised by 15 rubles per month, without restriction of this increase by the corresponding maximal pension sizes.
2. That pensions for years in service designated for officer personnel, Army and Navy warrant officers, extended-service personnel, and command and enlisted personnel of the organs of internal affairs cannot be lower than the minimal old-age pension amount established by law for blue and white collar workers.
3. That the minimum amounts of pensions for loss of a breadwinner to parents and wives of officer personnel, Army and Navy warrant officers, extended-service personnel, and command and enlisted personnel of the organs of internal affairs who have died due to a wound, concussion, or disabling injury received in defense of the USSR or in performance of other duties of military service (service duties) or due to illness related to time served at the front, be raised to 70 rubles, and for parents and wives of enlisted personnel of organs of internal affairs who have died from these causes, to 60 rubles per month.
4. That pensions for years in service to retirees from the ranks of officer personnel, Army and Navy warrant officers, extended-service personnel, command and enlisted personnel of the organs of internal affairs who are working as blue-collar workers or foremen be paid in full, regardless of any wages earned.
5. That the proposed amendments to decisions by the USSR government be approved.
6. That measures provided for by points 1-3 of this decree be introduced as of 1 October 1989, and those from point 4, as of 1 Jan 1990.

Chairman of the USSR Council of Ministers N. Ryzhkov  
Administrator of the USSR Council of Ministers M.  
Shkabardnya  
Moscow, Kremlin, 21 August 1989 No 673

**Amendments to the Decisions of the USSR Government**

In the provision on pension support of officer personnel, Army and Navy warrant officers, and extended-service personnel and their families, ratified by decree of the USSR Council of Ministers dated 10 Nov 1982, No 986:

a) The following paragraphs should be added to point 18 (in the version of the decree of the USSR Council of Ministers dated 26 July 1984, No 814):

"Officer personnel, Army and Navy warrant officers, and extended-service personnel who have become invalids due to wounds, concussions, or disabling injuries received in defense of the USSR or in performance of other duties of military service, or due to illness associated with performance of service in line units, staffs, and institutions belonging to the active Army in the period of the Great Patriotic War, pensions for years in service counted in accordance with paragraphs 13-17 and paragraph one of point 18 of this Provision (including in the corresponding maximum amount provided for by point 67) are raised by 15 rubles a month.

Pensions for years in service designated in accordance with this Provision cannot be lower than the minimal amount for old-age pensions established by law for blue and white collar workers";

b) Paragraphs two, three, and four of point 41 (in the version of the decree of the USSR Council of Ministers dated 26 July 1984, No 814) should be supplemented by the following words: "and for the parents and wives of these service members, 70 rubles per month";

c) In the last paragraph of point 67 (in the version of the decree of the USSR Council of Ministers dated 26 July 1984, No 814), the words: "raise or increase provided by point 23" should be replaced by the words: "increase or raise provided by paragraph two of point 18 and by point 23";

d) Paragraph four of point 69 and paragraph two of point 76 are acknowledged to have lost their force;

e) Point 75 should be interpreted as follows:

"75. Pensions for disability and for loss of breadwinner are paid in full, regardless of the earnings or other income of the pensioner";

f) From paragraph one of point 76, paragraph one of point 79 and point 81, cross out the words: "and for class-III disability", and from paragraph three of point 76, cross out the words: "A pension for class-III disability paid to pensioners indicated in paragraph two of this point cannot be lower than the corresponding minimal pension provided for by sub-point "a" of point 24 of this Provision";

g) Paragraphs three and four of point 79 should be interpreted as follows:

"Pensioners from the ranks of officer personnel, Army and Navy warrant officers, and extended-service personnel working as blue-collar workers and foremen, regardless of their place of work";

h) From point 82, cross out the words: "and to pensioners having income from cottage industries."

### Improving Tank Undercarriages

90A10210B Moscow TEKHNIKA I VOORUZHENIYE  
in Russian No 11, Nov 89 pp 6-8, C4

[Article based on foreign press materials by Col A. Telminov, candidate of technical sciences, and Col A. Zagudayev, candidate of technical sciences]

[Text] High mobility along with firepower and protection presently is viewed abroad as one of the most important characteristics of tank combat effectiveness. A tank's potentially high speed capabilities are ensured chiefly by a powerful engine and efficient type of transmission, but realizing these speed qualities, especially on rugged terrain and off roads, depends to a considerable extent on improvements to the tank suspension and tracked propulsion. It is through these elements that the tank hull receives impacts on running into irregularities, impacts which cause it to oscillate and vibrate, forcing the driver to reduce the vehicle's speed. Designers have a natural desire to provide the cushioning system ensuring maximum hull stability while the vehicle is moving. This would also solve the problem of stabilizing the armament and observation system when firing on the move.

From the moment of their creation, tank cushioning systems have undergone significant design changes, from the rigid attachment of road wheels to the hull and use of various metal springs as elastic elements to torsion bars and hydraulic and hydropneumatic systems. Individual and interconnected suspensions are used here.

Modern foreign tanks basically use individual cushioning systems with torsion bars as elastic elements and with hydraulic shock absorbers. They considerably surpass the interconnected spring systems, which provide smoothness of tank movement only at slow speeds and which, moreover, are less survivable.

The basic purpose of the suspension's springs and torsion bar is to reduce the forces transferred from the tank wheels to its hull. A spring must have a "soft" characteristic for this purpose. Shock absorbers (dampers), which convert kinetic energy of hull oscillations into heat and release it into the atmosphere, are installed on suspension elements to reduce the amplitude of oscillations and ensure their rapid dampening. Since forces also are transmitted from the wheels to the tank hull through the shock absorbers, the force of their resistance must be small during direct motion of the wheel when it is moving toward the hull, and during reverse motion the force must increase to hinder the hull's downward displacement.

Designers strive for an optimum correlation between characteristics of springs and shock absorbers. The difficulty of creating a "soft" torsion spring is connected with the torsion bar's length limitation (no greater than the width of the tank hull) and its torsion angle (it is believed that possibilities for increasing torsion bar strength characteristics essentially have been exhausted

at the present time). The static torsion angle of the torsion bar under the effect of the tank's weight being received by the wheel must be approximately one-third of the total torsion angle to provide sufficiently great dynamic motion of the wheel when moving over irregularities. This then determines the spring rate, which can be reduced only by increasing the number of road wheels. This is one of the reasons that a number of countries have shifted to a seven-wheel arrangement for tank undercarriages. One other deficiency of torsion springs, in the opinion of foreign specialists, is their linear response, which does not provide sufficient energy-intensiveness of the suspension.

Foreign specialists link the possibilities of further improving torsion suspensions with the use of more complicated spring designs. A pipe-bar tank suspension (see following figure) can serve as an example of such a solution. It consists of two torsion pipes within which a torsion shaft operating successively with one of the pipes is located. Such a design permitted increasing the overall torsion angle of the torsion bars and reducing their rigidity. The second torsion pipe begins to operate after 80 percent of the wheel's dynamic motion has been taken up from the jaw clutch on the balance arm axis, thanks to which the spring rate characteristics increase in the final section. The nonlinear response of the pipe-bar spring is more favorable for providing smoothness of tank movement. In the opinion of foreign specialists, however, this solution is far from perfect because of the insufficient energy-intensiveness of the torsion pipes.

Certain hopes rest on the use of hydropneumatic suspensions. They have a progressive nonlinear response near optimal providing high smoothness of motion and the opportunity of substantially increasing the dynamic motion of road wheels. Gas in an enclosed volume is the elastic element of such suspensions, and oil is used for sealing it and as a working fluid for the shock absorber. When the spring and shock absorber are combined in one housing the hydropneumatic suspension becomes more compact; when it is situated externally the tank's inner volume is freed and an opportunity additionally appears to adjust its clearance and control suspension characteristics relatively easily.

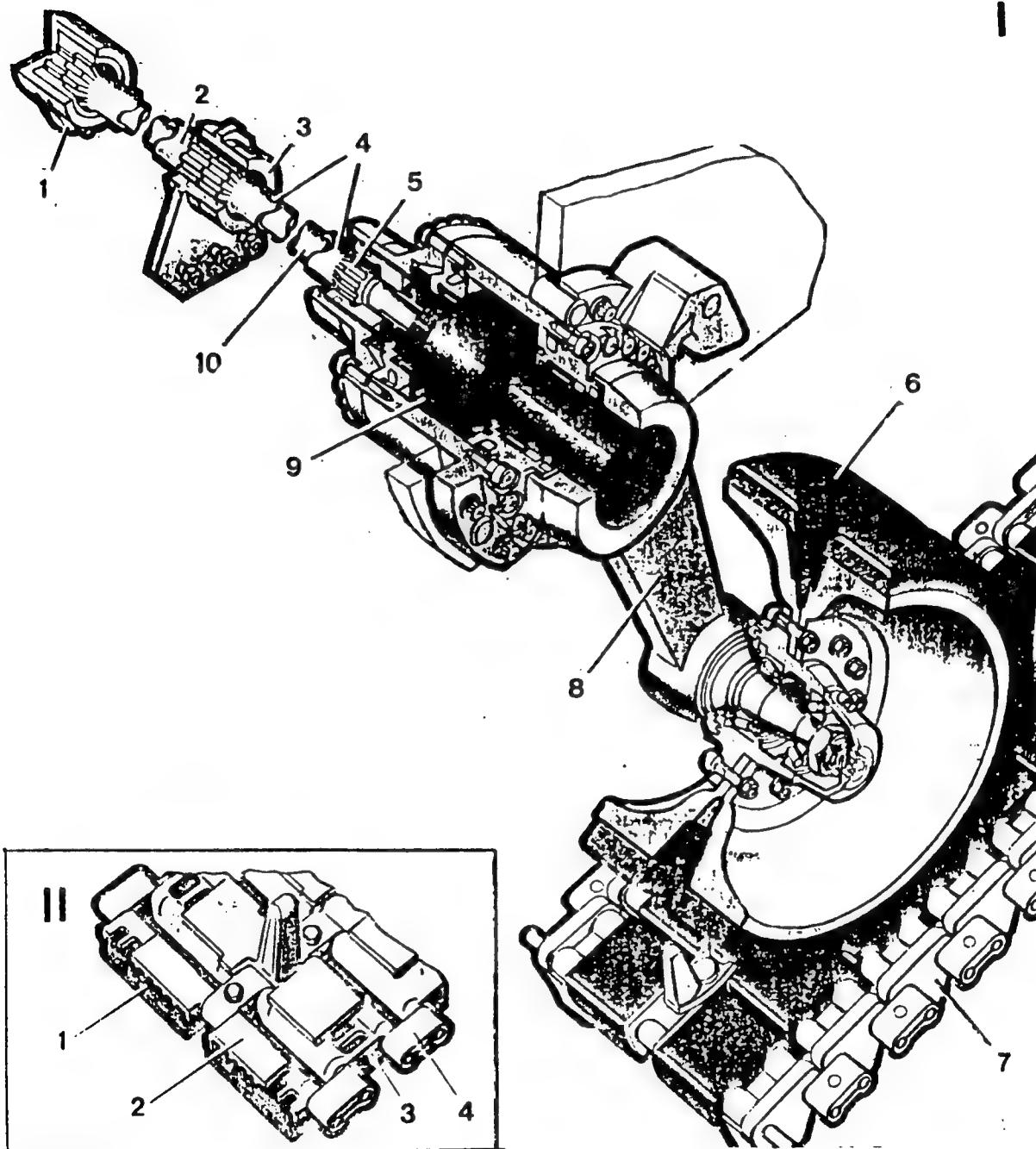
But it has been announced that serious deficiencies were revealed in these designs in the course of work. Low heat-dispersing ability leads to heating of the gas, an undesirable increase in the spring rate and an uncontrolled change in clearance. It was learned moreover that the system for changing clearance requires an enormously greater power take-off from the engine than was assumed and, in addition, reliability of the entire cushioning system is reduced considerably with the use of this rather complex system. It was announced that for this reason the majority of hydropneumatic suspension developments did not go beyond prototypes.

The cushioning systems of foreign tanks as a rule use telescopic piston hydraulic shock absorbers. Demands

## GROUND FORCES

JPRS-UMA-90-010  
25 April 1990

## Tank undercarriage



## Key:

- I. Tank suspension with successive engagement of elastic elements
  - 1. Movable support
  - 2. Torsion pipe
  - 3. Intermediate support
  - 4. Torsion pipe
  - 5. Splined joint
  - 6. Road wheel with rubber mass

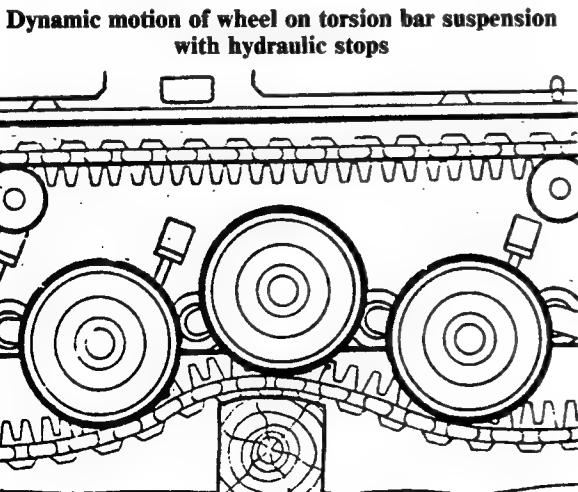
- 7. Track with rubber-metal linking and rubberized race
  - 8. Balance arm
  - 9. Damper
  - 10. Torsion shaft
- II. Track with rubber-metal linking
  - 1. External rubber shoe
  - 2. Steel strap
  - 3. Track link
  - 4. Connecting shackle

for energy-intensiveness and accordingly for the heat-dissipating capability of shock absorbers increase considerably with an increase in weight and speed of main tanks. Therefore a trend has been seen toward using blade hydraulic shock absorbers having a larger contact area with the hull armor, which ensures better heat removal. In addition, blade hydraulic shock absorbers also have better configuration features, since they can be installed coaxially with the balance arm.

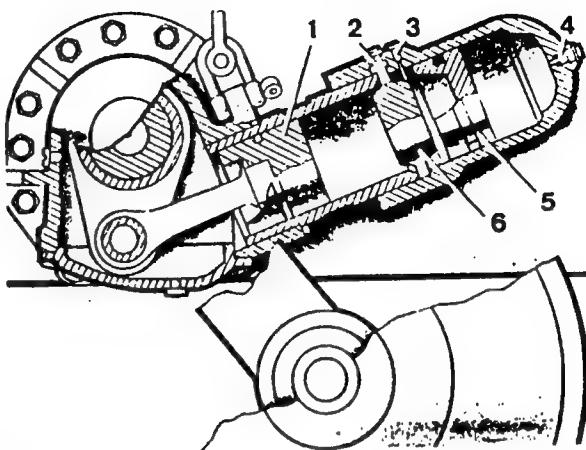
The resistance force of hydraulic shock absorbers is proportionate to the square of the road wheel displacement velocity, which predetermines their high energy-intensiveness and effectiveness when a tank moves over large irregularities. But when irregularities are small, road wheel displacements are slight and the springs essentially do not function. In this case the resistance of hydraulic shock absorbers increases sharply and intensive high-frequency vibration loads are transferred to the tank hull. The vibration affects accuracy of weapon stabilizer operation and worsens crew habitability conditions.

The attempt to get rid of this deficiency led foreign designers to develop friction shock absorbers with a resistance proportionate to wheel motion. It was reported, however, that they proved ineffective when moving over rugged terrain because of low energy-intensiveness. Therefore spring wheel-motion limiters in the suspension were replaced by so-called hydraulic stops which essentially operate like hydraulic shock absorbers in the last 140 mm of the wheels' direct motion. It is believed abroad that the hydraulic stops are comparable in energy-intensiveness with torsion bars, and for them this indicator is almost 2.5 times greater than for all friction shock absorbers. It is assumed that with the use of hydraulic stops a tank's cushioning system is capable of providing high indicators of motion smoothness in a wide range of speeds.

Foreign specialists believe that an overall serious deficiency of existing cushioning systems is the impossibility



Hydropneumatic suspension elements



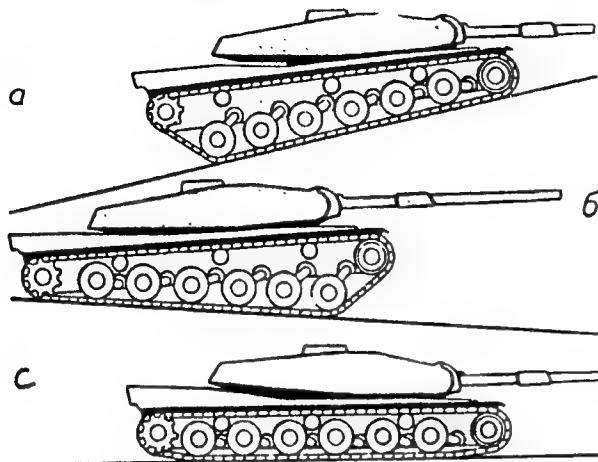
Key:

1. Piston
2. Working fluid filling hole
3. Breather
4. Nitrogen filling hole
5. Divider piston
6. Damper

of providing great motion smoothness in the entire range of external disturbances actually acting on the tank hull. This is connected with the fact that in designing the cushioning system its characteristics are chosen based on the condition of best dampening of oscillations in the most unfavorable resonant conditions of movement. But the system's effectiveness is reduced when external disturbances with other frequencies (below or above resonant frequencies) act on the tank, which leads to a limitation in the tank's speed capabilities, a decrease in the effectiveness of weapon employment, and a deterioration in crew working conditions.

Foreign specialists believe one promising direction to be creation of tank cushioning systems with controllable (adjustable) characteristics. Two possible principles of operation of such systems have been developed theoretically. One of them is based on continuous location of the route profile ahead of the tank by a special sensor (laser, radar or ultrasound). Data on parameters of irregularities as well as on the tank's speed and the position of its hull in space are converted by an on-board computer into signals for controlling the actuators, which change the suspension characteristics so that when a road wheel runs into an irregularity, disturbances transmitted to the tank hull are minimal. The tank speed also can change simultaneously to increase the accuracy with which the hull is stabilized in space. It is believed that this principle of cushioning system control can be realized on the basis of hydropneumatic springs.

A simpler control version is proposed for mechanical systems, based on the registration of hull deflections from a given attitude. Based on signals from on-board

**Tank hull stabilization using controllable hydropneumatic cushioning system****Key:**

- a. Ascending
- b. Descending
- c. In cover

gear, powerful suspension actuators oppose these deflections and stabilize the tank hull.

It is asserted that the use of controllable cushioning systems will permit realizing the speed capabilities of modern tanks practically completely, considerably simplifying and increasing the accuracy of weapon stabilizers, and improving crew working conditions. But creating such systems involves complicating them considerably. It is necessary to solve a number of problems connected with ensuring reliability of elements and of the system as a whole and its speed, economy and effectiveness. In addition, the functioning of these systems requires additional power expenditures which foreign specialists believe can be 10-15 percent of engine output.

Tank maneuverability and cross-country capability, especially on marshy, sandy and other soils with a weak supporting surface, depends directly on sophistication of the tracked propulsion. Its elements are subjected to the greatest loads compared with other tank machine units and interact directly with abrasive and aggressive media. In this regard, in developing or modernizing the tracked propulsion there is a substantial increase in the extent and labor-extensiveness of theoretical research, the result of which is very difficult to forecast. Therefore work to improve longevity, reliability, resistance to mines, and other characteristics of individual elements of the tracked propulsion usually is done on full-scale models in the course of their testing.

The task of ensuring high longevity of the tracked propulsion, determined by track life, is accomplished above all by using rubber-metal linking in their design. As has been reported, however, foreign specialists presently do not have a common opinion or clear solutions

for the designs of these linkings. Serious failures have been noted in creating new tracks.

It is planned to use replaceable rubber pads and additional metal lugs to improve track adhesion with the soil. The design of the track race is being improved to reduce vibration transmitted to the tank hull. In addition, work is under way to study options for the arrangement of running wheels depending on the track link pitch, and an elastic connection of final reduction assemblies, track tensioning mechanisms and track support rollers with the tank hull is proposed, which in the opinion of foreign specialists will permit reducing the vibration level by 30-70 percent.

An attempt is being made to reduce the weight and load on tracks by using new materials. Hopes are resting in particular on composite materials and plastics. It is noted, however, that the shortage of such materials does not permit hoping for appreciable successes in the near future.

Another possible solution is considered the use of various compensating devices and in the future also automatic track tension adjusting systems in tracked propulsion, but this involves increased complexity of undercarriage design, increased weight and volume, and increased cost.

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**Strela-2M Surface to Air Missile System**

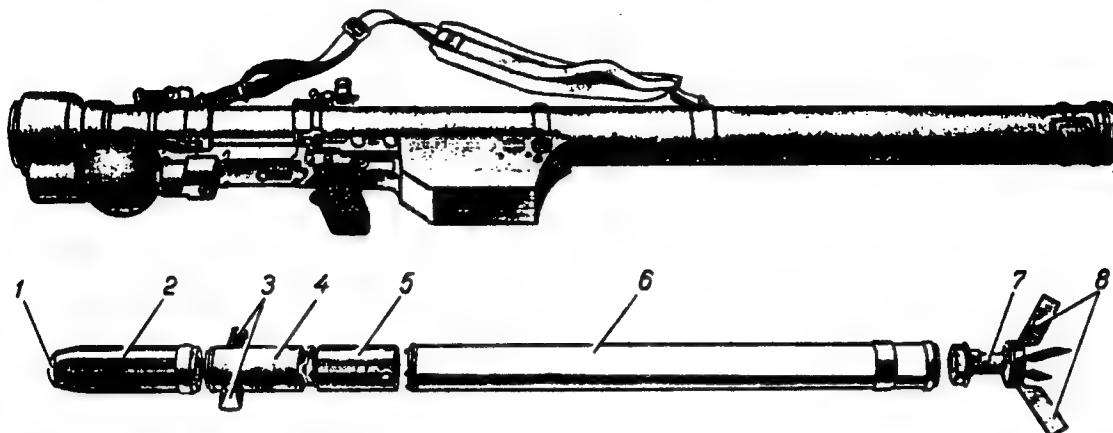
90A10210A Moscow VOYENNYYE ZNANIYA in Russian No 1, Jan 90 pp 13, C4

[Article by Col (Ret) V. Knyazkov: "Handheld" Missile"]

[Text] A meeting "engagement" began during an exercise. The situation was difficult and dynamic, one in which you must be on the alert, as the saying goes. And when "enemy" combat helicopters emerged from a nearby grove and darted toward our positions, the SAM gunners already were on guard. A small launch tube was shouldered, and flaming arrows rushed toward the rotary-wing craft at enormous speed. The comparison with arrows is no accident. These were surface-to-air missiles of the Strela-2M portable SAM system being launched.

Just what are the capabilities of this "arrow"? The surface-to-air missile of the Strela-2M portable SAM system is capable of destroying visually observed airborne targets (aircraft, helicopters, cruise missiles) which radiate thermal energy into surrounding space. It stands to reason that the scale of the missile's use is not unlimited; there are restrictions. For example, the above targets are confidently engaged at distances from 800 to 4,200 m in an altitude range of 50-2,000 m; it is better to fire against jet aircraft and cruise missiles flying at

General view of portable SAM system and design of missile



Key:

1. Transparent fairing of thermal homing head
2. Nose section
3. Control surfaces
4. Steering section
5. Warhead section
6. Propulsion section
7. Stabilizer
8. Fins

speeds up to 260 m/sec on rear-quadrant courses. Propeller aircraft and helicopters can be fired on both on rear-quadrant as well as head-on courses, but on the condition that their speed is not over 150 m/sec. Fixed targets also can be engaged if they emit thermal energy and are within the impact zone.

The surface-to-air missile is a guided rocket-propelled projectile which incorporates three very important components: control equipment, warhead with impact fuze, and solid-propellant rocket motor. Here are a few of its characteristics: launch weight 9.8 kg, length with fins folded 1.44 m, caliber 72 mm. The average flight speed at a temperature of +15°C reaches 500 m/sec, with the controlled flight range at least 4,200 m. Rotation rate relative to the longitudinal axis is 15-20 revolutions per second.

The missile consists of four independent sections: nose, steering, combat and propulsion. The first two accommodate on-board control equipment: the nose section holds the thermal homing head and autopilot; the steering section holds the control-surface servo, angular-rate sensor, on-board power source and a solid-propellant gas generator.

The thermal homing head realizes the so-called passive homing method in practice; its essence is use of the target's thermal contrast against the surrounding background (for example, red-hot nozzles of aircraft and cruise missile jet engines, which are powerful sources of invisible infrared emissions). The infrared rays pass through the transparent nose cone and enter the optical mirror system, which has

the task of focussing them and subsequently forming a control signal for guiding the missile to a predicted position.

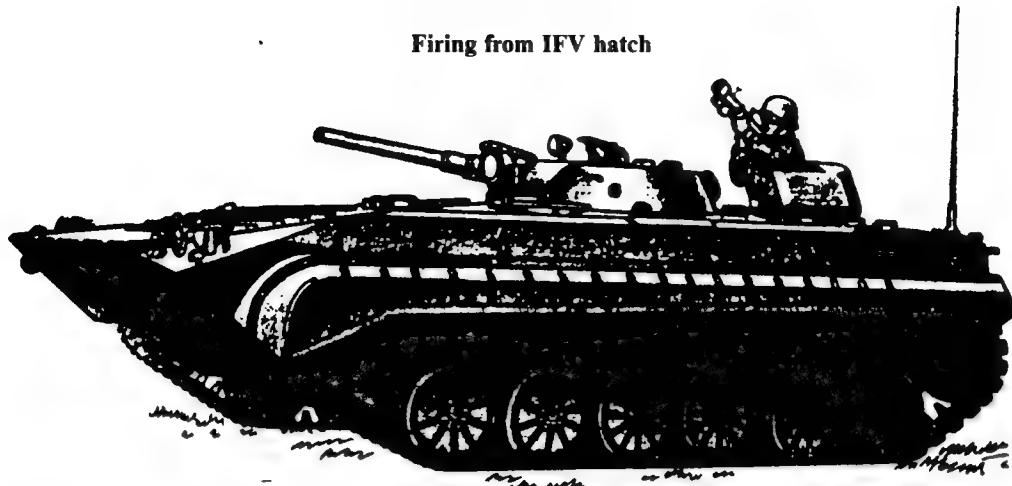
The autopilot receives signals coming from the thermal homing head and forms control commands, sending them to the control-surface servo—the autopilot's actuator for deflecting the control surfaces. The angular-rate sensor also performs an important function. Like a vigilant sentry, it does not allow the missile to oscillate relative to the transverse axes, it sensitively detects angular velocities of missile airframe oscillations, and it produces signals used for quieting the missile.

The on-board power source consists of a turbogenerator and stabilizer-rectifier. The turbogenerator rotor rotates off a small turbine whose blades gather momentum from powder gases obtained from combustion of a propellant charge contained in the cavity of the solid-propellant gas generator. This unit also powers the control-surface servo.

The third section contains a fragmentation-high explosive-hollow charge warhead and firing device. The warhead's overall weight is 1,150 g. The warhead explosive charge weighs 350 g. The firing device includes two mechanisms—remote arming and self-destruction. It also has two safety stages which are removed only in flight.

Special mention must be made of the propulsion unit. It has to be so powerful that in a matter of seconds the missile is accelerated to supersonic speed, which is a half-kilometer per second. Only then will it be a real flaming arrow. This is why the propulsion unit consists of two

Firing from IFV hatch



independent units: an ejection motor and sustainer motor. The ejection motor operates on solid fuel and has a local but important task of ensuring the missile's reliable launch. The designers provided for this motor to accelerate the missile to an initial velocity of 28 m/sec and give it an angular rate of rotation of 20+5 revolutions per second. The motor switches off even before the missile leaves the tube for the safety of the SAM gunner.

The sustainer [marshevyy] motor operates when the missile is already on the flight path, on the "march." Its functions are to accelerate the missile to a speed of 500 m/sec and maintain it in flight. It is triggered from delayed-action igniters and it switches on 5-6 m from the front edge of the launch tube. Again, this is done to ensure the safety of the SAM gunner—the jet of flame bursting from the nozzle unit must not hit him. Four fins are hinged to the rear end of the propulsion unit at a certain angle to the longitudinal axis. This is necessary to maintain the missile's rotation in flight and to stabilize it.

What happens in the "body" of this missile at launch? When the power source of the portable SAM system is turned on, the homing head and launch circuit "come alive" above all. If the SAM gunner squeezes the trigger, several seconds will remain until missile launch. As soon as the target's thermal emission enters the thermal homing head's field of view, the gunner will be notified of this instantaneously by hearing an audible signal. When the homing head shifts to an automatic tracking mode, he also will see a light signal. Then 0.8 seconds later voltage is supplied to the electric igniter of the solid-propellant gas generator. After another 0.6 seconds the solid-propellant gas generator and together with it the on-board power source enters the regime, after which voltage is supplied to the ejection motor's electric igniter. Thus the missile is launched 1.4 seconds after the light signal appears.

When the missile nose section emerges from the launch tube, the control surfaces spring open and voltage is supplied to the firing device—to the safeties and the self-destruct. As soon as the missile has fully emerged the fins open up immediately, the sustainer motor is activated and

the first safety stage is removed at a distance of 5-6 m, and the second stage is removed at a distance of 80-250 m. If there are any perturbing factors such as wind gusts trying to knock the missile off course, the angular-rate sensor will "notice" this and the autopilot will produce commands for deflecting control surfaces and will direct the missile to an intercept point with the target. When the missile hits, the firing device detonates the warhead. If there is a miss the self-destruct is triggered 14-17 seconds after launch and the missile blows up.

Successful firing with the Strela-2M portable SAM system depends largely on personnel proficiency. Therefore SAM gunner combat training must be faultless in order to use this "handheld" missile reliably.

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"Patriot", "Voyennyye znaniya", 1990

Firing from a kneeling position



**Operating Features of GM-569 Tracked Vehicle**  
*90A10210C Moscow TEKHNIKA I VOORUZHENIYE*  
*in Russian No 1, Jan 90 pp 12-13*

[Article by Lt Col (Res) N. Kosarev]

[Text] The GM-569 tracked vehicle (Fig. 1) with hydro-mechanical transmission differs substantially from vehicles with conventional mechanical transmissions in the arrangement of basic machine units and assemblies and in the placement and purpose of controls and monitoring-measuring devices.

The hydromechanical transmission combines in a single machine unit a matching reduction gear, torque converter, planetary gearbox, summing series and hydraulic positive-displacement [gidroobyemnyy] steering mechanism. Using the transmission, especially in combination with the steering mechanism's hydraulic positive-displacement drive, the procedure for preparing vehicles for movement and the techniques and methods of operating them also changed.

Automatic thrust control by the torque converter permits beginning movement essentially in any gear (with the exception of fourth) and moving in high gears at slow speed. But it should be borne in mind that prolonged operation in this mode can lead to the transmission overheating and overexpenditure of fuel (since at this time the torque converter is operating at low efficiency). The driver is warned of improper gear selection by light signaling (the "Downshift" transparency). In addition, one should avoid having the vehicle move out in first gear with brakes on (the "Brake" transparency), since this inevitably will lead to putting the brakes and final drives out of commission from their overheating.

The gear shift control on the GM-569 is electromechanical with hydraulic actuators. In engaging it the driver presses on the gear shifting gate 1 (Fig. 2), closing the corresponding electrical contacts. Before the vehicle starts off place the kind-of-movement switch 4 in one of the appropriate positions: "PKh" (Forward), "ZKh" (Reverse), or "R=V/2" (Turning in Place About the Center of the Vehicle). The kind-of-movement switch must be in the "PKh" position when stopped or parked.

The kind of movement is selected only with the vehicle fully stopped and braked. The gear shift lever must be in the "H" position.

A torque converter interlock device is provided on the vehicle to improve engine economy and maintain optimum hydromechanical transmission thermal conditions when operating under favorable road conditions. Its switch 3 is located on the gate. The interlock is engaged only when moving with the engine crankshaft at an rpm of at least 1,700. The torque converter must be locked on steep downgrades without fail, since only in this case is it possible to slow the engine. The interlock functions in all gears, and it automatically disengages when they are shifted. It must be remembered that it is categorically prohibited to engage the torque converter interlock if the "Downshift" transparency located on the engine instrument panel is lit.

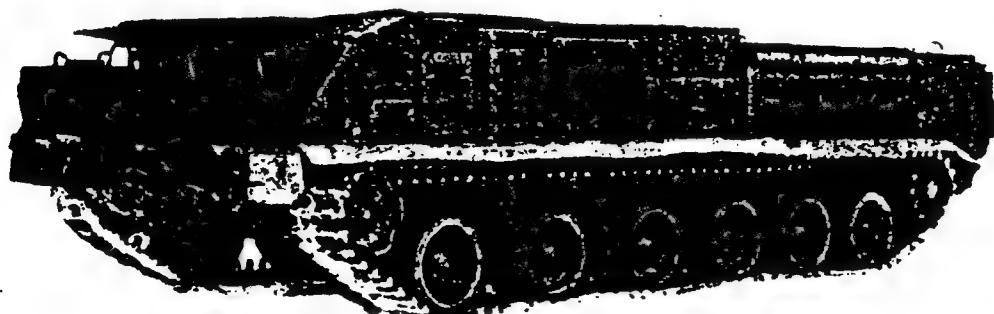
The hydromechanical transmission control electrical circuit has an interlock that includes the toggle switch "Blokir.upr." [Control Interlock] on the on-board electrical supply system panel. Gear shifting is possible in this control mode only at a certain vehicle speed.

The "Downshift" transparency lights up if the speed does not conform to the present gear. In this case increase fuel feed and (if the transparency does not go out) downshift.

When automatic interlock elements fail to operate the toggle "Blokir.upr." is placed in the "Otkl." [Off] position (emergency mode of operation). In this case gear shifting is supported in the full range of speeds. The vehicle is permitted to operate in this mode only in exceptional cases, with strict observance of established speed ranges. To ensure the vehicle's forward movement engage the 2d gear valve using the lever located on the valve box and lock it. To move in reverse, engage the reverse valve using the lever on the hydromechanical transmission reverse valve box.

It must be remembered that the hydromechanical transmission control arrangement precludes the possibility of engaging any gear with vehicle cushioning engaged and the reduction gear of the electrical power system generator reserve unit drive engaged. By pressing the neutral

Fig. 1. GM-569 vehicle



button 2 it is possible to disengage any gear without moving the gate lever to the "H" position.

A characteristic feature of the vehicle is controlling a turn using the steering column wheel with only the traction engine operating. The steering column tilts forward to make it convenient for the driver to enter and exit. It is locked in the operating position by a lever. The turning radius is controlled smoothly and continuously through use of a differential double-flow turning mechanism with hydraulic positive-displacement drive. The following turning modes are possible: in place about the vehicle's center with kind-of-movement switch in the "R=V/2" position; in place in the "PKh" [Forward] or "ZKh" [Reverse] modes; and in movement. To avoid throwing the tracks, it is recommended making the turn about the vehicle's center in sectors with a hard surface. It is prohibited to engage the gears.

The size of the turning radius depends on vehicle speed and engine crankshaft rpm. The vehicle's maneuverability is better at slow speed and high engine crankshaft rpm. It is not recommended turning and simultaneously slowing the vehicle with the stopping brakes to avoid a deterioration of controllability. The turning radius can be considerably reduced if neutral button 2 is pressed and crankshaft rpm is simultaneously increased. The turning radius is less when moving with unlocked torque converter than with interlocked torque converter. It

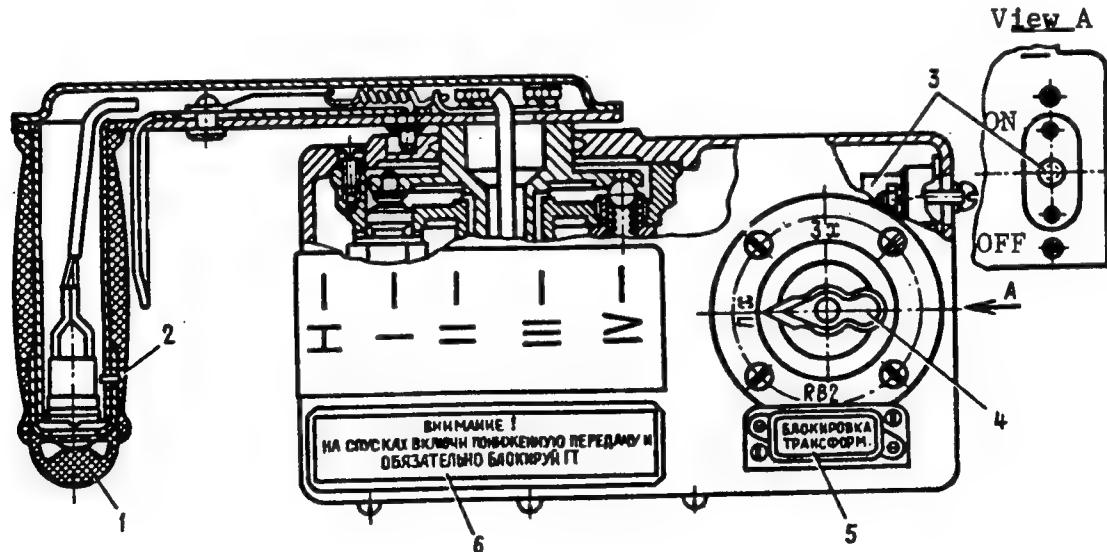
must be remembered that the direction of turn and direction of the steering wheel are mutually opposite when moving in reverse.

Dry-friction disk brakes are a feature that distinguishes the GM-569 from existing tracked vehicles. The stopping brake drive is hydraulic and the parking brake drive is mechanical. There is a hydraulic accumulator for braking with the engine not operating. As brake disks wear in the course of operation the clearance between them is reset automatically. During towing with engine off and tooth-type couplings from the final drives separated, the unserviceable vehicle should be braked and turns controlled by means of the two parking brake levers.

Limit switches connected to the red "Brake" transparency on the engine instrument panel are installed in the control drive for monitoring brake operation. The transparency lights up when both stopping as well as parking brakes are used.

During movement keep a careful eye on oil temperature in the hydromechanical transmission cooling system. If it exceeds 130°C, downshift and interlock the torque converter. If oil pressure in the hydromechanical transmission is below permissible (0.4 kg(f)/cm<sup>2</sup>), the "Main Pressure" transparency lights up. In this case increase engine crankshaft rpm by downshifting the hydromechanical transmission.

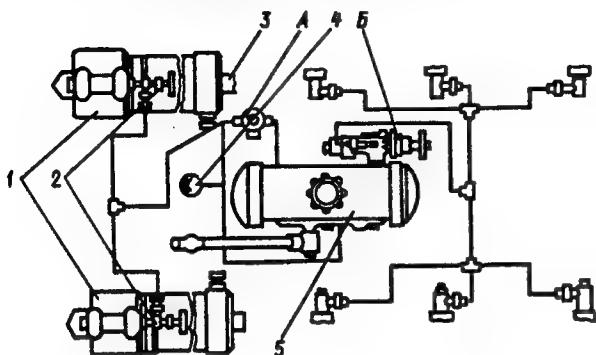
Fig. 2. Gear shifting gate



Key:

1. Neutral button
2. Gear shift lever
3. Torque converter interlock switch
4. Kind-of-movement switch
5. Illuminated transparency: "Torque converter interlock"
6. Illuminated transparency: "Attention! Downshift on downgrades and definitely interlock the torque converter"

Fig. 3. Block diagram of cushioning and track tensioning control system



Key:

1. Track tensioning mechanisms
2. Track tensioning mechanism valves
3. Tensioning mechanism rod
4. Manometer
5. Manual pump

TSZp-8 oil is used in the hydromechanical transmission lubrication system and in the hydraulic positive-displacement steering mechanism replenishing tank. Its level in the hydromechanical transmission must be no lower than the dipstick's "V" mark after the vehicle has been parked for a day. The oil level in the hydraulic positive-displacement steering mechanism tank must be no lower than the "V" mark on the glass gauge.

Hydraulic mechanisms with a pneumatic compensator are used for tensioning tracks on the vehicle. Correctness of track tension is checked by external inspection after first placing the vehicle on a level area with firm soil. With a normally tensioned track its top run must lay on the supporting wheels without noticeable sag. The distance from the rod lug face to the tensioning mechanism cylinder face must be 25-100 mm. If it is more than 100 mm, one track link must be removed. Tracks are changed when 108 track links remain in the track after track links are removed but normal track tension does not result.

If it is necessary to tighten the track, first switch on the on-board electrical supply system power and close valves "A" and "B" (Fig. 3). The "Valves Closed" transparency lights up on the engine instrument panel. Then, opening valve 1 of the appropriate track tensioning mechanism, create a pressure of 90 kg(f)/cm<sup>2</sup> on manometer 4 using manual pump 5 (on vehicles of early series, until the "Pressure Normal" transparency goes on) and close valve 1. After tensioning the tracks, open valves "A" and "B" and the "Valves Closed" and "Pressure Normal" transparencies should go out.

The independent torsion-bar suspension is supplied with cooled hydropneumatic shock absorbers mounted on the 1st, 2d and 6th roadwheels. Only grades 40 and 65 low-temperature fluid (antifreeze) is used as coolant.

To engage the cushioning, first switch on the power of the on-board electrical supply system and close valve "A." The "Valve Closed" transparency should light up. Then open valve "B" and create a manometer pressure of 4120+10 kg(f)/cm<sup>2</sup> in the hydraulic system using manual pump 5. All other valves must be closed. After this close valve "B" and open valve "A."

The hydraulic system for engaging cushioning and for track tensioning is filled with carefully filtered TSZp-8 oil. Its level in the oil tank must be between the "V" and "N" marks on the dipstick.

High saturation with current sources is a feature of the vehicle's electrical equipment. In addition to traditional systems (storage batteries and the SG-10 starter-generator), the vehicle has a power supply system which includes a main unit of paired ac generators driven off the gas-turbine engine and a reserve unit of similar paired generators driven off the traction engine via a reduction gear. It must be remembered that using a traction engine for driving the reserve generator unit is permitted only when parked (in case the gas-turbine engine or main ac generators are disabled).

The time of continuous operation of the electrical power system driven off the gas-turbine engine and the main engine is stipulated by appropriate instructions. Power for consumers when parked also can be provided from an external source. To ensure a reliable start and stable operation of the gas-turbine engine in a heavy wind, it is desirable to place the vehicle so that the exhaust pipe is on the downwind side.

When the traction engine is operating on the electrical power system drive, keep crankshaft rpm constant and coolant temperature at least at 85°C. Remember that the reserve generator unit drive reduction gear can be engaged and disengaged only with engine off and gear shift lever in neutral.

Constantly monitor insulation resistance relative to ground when operating the electrical power system. If at least one insulation monitor shows that insulation resistance is below the permissible level (60 kilohm) or the "Danger! G-1 Network Insulation" ("Danger! G-2 Network Insulation") transparency lights up, turn off the power source and determine and remedy the cause for a reduction in insulation resistance.

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Features of IRM Vehicle

90A10210D Moscow TEKHNIKA I VOORUZHENIYE  
in Russian No 2, Feb 90 pp 10-11

[Article by Maj S. Vikulov and Sr Lt A. Vikulov: "Engineer Reconnaissance Vehicle Design Features"]

[Text] The IRM engineer reconnaissance vehicle was developed on the base of the BMP-1. The vehicle can be divided into three compartments—driving, crew and

engine—according to the layout of mechanisms and equipment and into four sections—forward, right and left fuel, and stern.

The engine (UTD-20) fuel system includes seven main and two auxiliary tanks holding a total of 600 liters. The main tanks are connected by lines and have a common drain system. They are filled from the vehicle roof through a mesh filter. Fuel level is measured by a dipstick through the filler neck. The auxiliary tanks, installed on the outside of the vehicle, are not connected to the general fuel system.

An air vent valve, which prevents the formation of a vacuum in the tanks as fuel is consumed, is mounted on the right fuel section wall of the engine compartment. The tank for consolidated fuel drain from injectors is attached to the bottom of the engine compartment by a tie bolt. Fuel is drained from it through ball valves located on the bottom of the vehicle (one each on the left and right sides).

The engine lubrication system uses MT-16p oil (M16, IKhP-3 and MTZ-10p are permissible substitutes). System capacity is 90 liters and tank capacity is 55 liters. It is recommended that the oil level be checked no earlier than 15 minutes after the engine has been shut down. To do this unscrew the plug on the panel above the engine after first cleaning dust and dirt from it, and unscrew the oil tank filler neck plug as well and remove the mesh filter. Lower the dipstick into the tank until it hits bottom. The oil level must be above the lower dipstick mark.

Oil heated to a temperature of 70-90°C is added to the system. Do not remove the mesh filter from the tank filler to do this. Change oil every 2,500 km, but no more infrequently than every 100 hours of engine operation. The valve for draining it is located on the bottom of the tank.

The engine cooling system is an enclosed, liquid, high-temperature system with forced circulation and ejection cooling of radiators (capacity 55 liters). Water with a three-component additive is used as coolant in summertime, and grade 40 or 65 antifreeze is used at temperatures below +5°C. It is permissible to use clean fresh water without additives for a short time; it should be replaced by a water solution with an additive at the very first opportunity.

To check the coolant level unscrew the expansion tank filler plug. The water level must be 50-70 mm below its upper edge, and antifreeze 85-90 mm below.

The coolant should be changed as infrequently as possible to reduce scale formation. To completely drain it open the louver inspection cover above the expansion tank and unscrew the plug from the filler, open the drain cock, remove the above-engine panel hatch, unscrew the plug in the transmission pan, then unscrew the plugs of the compressor pump and open the small cock in its upper part.

The drain cock is opened using a cable linkage by the eccentric control handle located in the crew compartment on the bulkhead to the right of the hatch. When the handle is turned clockwise the cable draws out the rod and opens a space through which water is drained from the pump through a pipe beneath the engine. To remove remaining coolant from the system, turn the crankshaft over 2-3 turns with the starter without supplying fuel.

The engine can be started by compressed air or using an electric starter driven from two 6ST-140R or 6STEN-140M storage batteries connected in series. A combination start (used when there is insufficient pressure in the air starting system) is performed by engaging the starter and supplying compressed air. The starter is engaged just a bit earlier to keep its gear from setting in the rotating flywheel.

Before starting the engine create an oil pressure of at least 0.25 MPa (2.5 kg/cm<sup>2</sup>) in the lubrication system, or at least 0.15 MPa (1.5 kg/cm<sup>2</sup>) when its temperature is above +60°C. Subsequently it is important to ensure that pressure in the main line is at least 0.2 MPa (2 kg/cm<sup>2</sup>) with minimum rpm, and to stop the engine immediately and find out the cause when pressure drops.

The preheating system preheater is installed in the engine compartment. To ensure that it starts after a lengthy break, first place the switch on the preheater panel in the "Operation" position, run the blower for 1-2 minutes, and only after this supply fuel. The supply regime is optimum if the characteristic noise of evenly burning fuel is heard and a slight bluish smoke is seen at the outlet from the boiler. Normal engine start is supported 20-25 minutes after switching on the preheater with an ambient air temperature of from -20°C to -25°C and 35 minutes later at a temperature of -40°C.

The engine is considered warmed up and ready for operation in all regimes on attaining a coolant and oil temperature of +55°C at the system outlet. To accelerate warm-up it is permissible to begin vehicle movement in low gear at an oil and coolant temperature of +30°C.

Before stopping the engine allow it to idle at least two minutes with a crankshaft rpm of 1,500-1,800, and reduce rpm to 800-1,000 immediately before stopping it; coolant temperature must be no higher than +70°C. Do not stop a hot engine, since there may be a sharp increase in temperature in the assemblies, the engine may freeze up, and fluid may be ejected through the pressure and vacuum relief valve because of a stop of circulation.

The vehicle pneumatic system is subdivided into the following lines depending on air pressure in the lines: 15 MPa (150 kg/cm<sup>2</sup>) high pressure to provide an air reserve in the system; 6.5-7 MPa (65-70 kg/cm<sup>2</sup>) medium pressure for starting the engine and controlling the stopping brakes; and 0.9-1.2 MPa (9-12 kg/cm<sup>2</sup>) low pressure for activating the control linkages. Cylinders can be charged by a compressor only while parked. Vehicle movement with compressor on is categorically prohibited.

To avoid formation of ice blocks in the pneumatic system in the winter operating period, observe a certain sequence and duration for scavenging the working cavities of compressor cylinders, water-oil separator, and compressor instruments. The first scavenging should be done five minutes after turning on the compressor and subsequent scavengings every 30 minutes of its continuous operation. Overall length of scavenging (from the moment the third stage valve is opened) must not exceed three minutes.

The hydraulic system is for controlling the wave barrier and the propeller shrouds and for driving the remote device of the long-base remote river mine detector. Nominal working pressure is 12-13 MPa (120-130 kg/cm<sup>2</sup>) and filling capacity is 100 liters. AMG-10 oil is used as the working fluid. Its level must correspond to the upper dipstick mark. The system should be filled only with clean AMG-10 oil, and oil cans should be opened only immediately before filling.

Electrical power sources include a generator with start-control gear and storage batteries with a recharger from an external power source. To check the degree of charge of storage batteries by voltage, press the starter button (for 5-7 seconds) without supplying fuel to the engine. The storage batteries must be recharged if the volt ammeter reading is below 17 volts.

Electrolyte density of a fully charged storage battery for areas with a mean air temperature in January of from -50 to -30°C must be 1.29; from -30 to -15°C—1.28; and from -15 to -4°C—1.24. Normal electrolyte level is 10-12 mm above the grids.

### Operating the Vehicle

In shifting gears take account of terrain irregularities and nature of the soil. Do not allow overloading of the engine and inconsistent gear shifting.

Before crossing difficult terrain sectors (marsh, deep snow), shift to the requisite gear in advance.

In negotiating short upgrades and small obstacles it is recommended placing epicyclic steering unit control levers in the first position without shifting down.

Obstacles consisting of various depressions or embankments are negotiated at a right angle, usually in first or second gear.

Ditches up to 2.7 m wide should be negotiated in second gear. Sharply increase fuel feed at the moment the nose hangs over the ditch, and sharply reduce it when the front rollers touch the opposite edge of the ditch.

Log post obstacles can be negotiated from the move, destroying them. Disengage the main clutch before the tracks contact them. Obstacles consisting of a single row of hedgehogs can be destroyed by driving the vehicle on them while accelerating in second or third gear, directing the vehicle at the middle of the hedgehog.

When the vehicle is moving over bumpy, broken-up roads do not permit sharp swinging or rough impacts of the roller balance arms against the stops.

On steep downgrades it is prohibited to move with the main clutch disengaged or out of gear.

On marshy terrain it is not recommended moving right after a vehicle in front.

Pass stumps and hummocks lower than vehicle clearance between the tracks, and drive around those even with or above the clearance; in exceptional cases cross them in first gear, driving on them with the tracks.

The vehicle is braked by the engine, by the stopping brakes, or simultaneously by both.

Braking distance depends on speed and the amount of track adhesion with the soil. It increases several times on damp and slippery sections of the road compared with dry sections.

When the vehicle gets stuck, self-extraction can be performed using a log attached to the tracks or two cables attached to some immovable object on the terrain and to the tracks.

Before entering water, shift the control lever for the mechanism protecting the engine from water entry (located to the left of the driver's seat and with two fixed positions) to the "Water" position. Exhaust gases then go out through the exhaust pipe, or through the ejector when the lever is placed in the "Land" position.

In entering the water, choose sectors with a firm, gentle bank without holes and ledges where possible. Enter standing water at right angles to the edge; when there is a heavy current enter at an acute angle to the direction of the current, and when there is significant wave action, enter at a 90° angle to wave propagation, with the water propulsion system on.

Exit onto the shore in second gear perpendicular to the water's edge or with the current at an acute angle to shore, maintaining maximum rpm.

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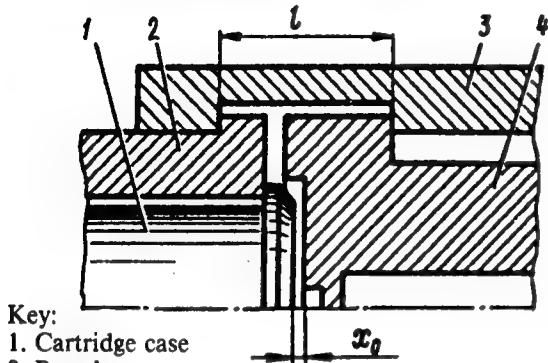
### Mirror' Gap in Firearms

90A10210E Moscow TEKHNIKA I VOORUZHENIYE  
in Russian No 2, Feb 90 pp 16-17

[Article by Col V. Nikitin and Lt Col V. Fedurin]

[Text] In the process of manufacturing weapon parts and cartridges, maximum deviations are set for their dimensions in such a way that with the bolt locked and a cartridge in the chamber, there always is a gap between the bottom of the cartridge case and the bottom of the bolt recess. Its size is characterized by the distance ( $X_0$ ) between the bottom of a cartridge case occupying an extreme forward position in the barrel and the bottom of the bolt recess (the "mirror," hence the name "mirror" gap), occupying an extreme rear position in the receiver (Fig. 1).

**Fig. 1. Diagram of position of cartridge case and parts of the locking assembly**

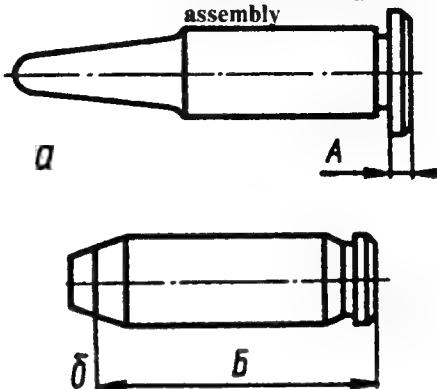


Key:  
1. Cartridge case  
2. Barrel  
3. Receiver  
4. Bolt

$X_0$ —"Mirror" gap—distance between bottom of cartridge case occupying extreme forward position in the barrel and bottom of bolt recess (the bolt "mirror")  
 $l$ —Distance between bearing surfaces of barrel and bolt in the receiver

The minimum "mirror" gap is determined by the possibility of guaranteed locking of the bolt, and the maximum gap by the strength of the cartridge case (against

**Fig. 2. Cartridge gauges for checking the locking assembly**



Key:  
a. Resting on the breech end of the barrel  
b. Resting on the cartridge seat

cross ruptures in firing) and functioning reliability of the weapon's automatic equipment.

The position of the bottom of the bolt recess relative to the fixing surface of the chamber is checked by cartridge gauges (Fig. 2). Here the breech end of the barrel is the fixing surface of a rifle cartridge chamber; for a Model 1943 cartridge it is the bullet seat. Cartridge gauges have specific sizes for each weapon model (see table).

Designation		Working Size for Weapon, mm						
Cartridge Gauges	Sizes	AKM <sup>1</sup>	RPK <sup>2</sup>	AK74	RPK74	SV D <sup>3</sup>	PKM <sup>4</sup>	SGM <sup>5</sup>
K-3 PR	B	32.85	32.85	31.70	31.70	-	-	-
K-4 NYe	B	-	-	31.85	31.75	-	-	-
K-4 R	B	33.05	33.05	-	-	-	-	-
K-4 PR	A	-	-	-	-	1.625	1.625	1.625
K-5 NYe	A	-	-	-	-	1.702	1.778	1.702
K-5 BR	B	33.15	33.15	32.00	32.00	-	-	-
K-6 BR	A	-	-	-	-	1.828	-	-

1. Modernized Kalashnikov assault rifle  
 2. Kalashnikov light machinegun  
 3. Dragunov sniper rifle  
 4. Kalashnikov tank machinegun  
 5. Modernized Goryunov heavy machinegun

Cartridge gauges are divided according to purpose into go, no-go and defect. Go and no-go gauges are used for checking the "mirror" gap in weapons with an adjustable locking assembly and for fitting new locking assembly parts for all weapon models. Defect gauges are for checking the "mirror" gap in weapons with a nonadjustable locking assembly.

It is more economical to have large "mirror" gap limits, but this is worse from the standpoint of weapon functioning during firing. Maximum "mirror" gap deviations

depend on the length of the locking assembly (distance  $l$  between bearing surfaces of the barrel and bolt in the receiver).

There is an opportunity to have a comparatively large "mirror" gap in weapon models with a so-called short locking assembly. For example, the difference between maximum sizes of the "mirror" gap is 0.2 mm in the Kalashnikov assault rifle, and 0.153 mm in the Kalashnikov machinegun. The "mirror" gap is less in weapon models with a long locking assembly. For example, the

difference between maximum sizes of the "mirror" gap is 0.077 mm in the Goryunov machinegun.

Parts of the locking assembly (bolt bearing surfaces, receiver locking recesses, chamber fixing surfaces, elements fastening the barrel to the receiver) wear in the process of operating weapons, which leads to an increase in the "mirror" gap. This can cause cross rupture of the cartridge case: the part of the case which breaks off remains in the chamber and interferes with seating of the next cartridge. Firing stops. A special tool (extractor) is required to remove the broken-off front part of the case from the chamber.

Case rupture occurs because when a round is fired, its weakest sections (near the mouth) deform first of all because of an increase in pressure of powder gases, and then other sections deform as pressure builds. At the same time the powder gases also act on the base of the cartridge case. Because of this the mouth of the case presses firmly to the chamber walls and its base moves backward, stretching the case in an axial direction, and presses to the "mirror" of the bolt, taking up the "mirror" gap.

The larger the "mirror" gap, the greater the axial deformation of the cartridge case. When it exceeds permissible values there is a cross rupture of the case. Parts of the locking assembly (bolt, receiver, barrel) receive elastic deformations at the moment the round is fired, which increases case deformation. Cumulative absolute deformation of locking assembly parts depends on its length. This is why a case cross rupture occurs more often in weapon models with a long locking assembly than in models with a short one. The size of the "mirror" gap is set less for them for this same reason.

Officials must monitor the size of the "mirror" gap in the process of weapon use. A check is made when the weapon is prepared for firing, during maintenance, and during repair.

During maintenance and in medium and capital repair specialists of the missile-artillery armament service and flaw-detection specialists of repair entities monitor the "mirror" gap using cartridge gauges.

The "mirror" gap is checked with cartridge gauges only after thorough cleaning of the locking assembly and removal of the recoil (return) spring to keep the bolt from sharply impacting and damaging the gauge. Locking force for each weapon model is set by repair documentation. For example, it is 150-200 N for the AKM, AK74 and RPK and 150-350 N for the PKM, SGM and SVD.

Experience shows that it is advisable to check the "mirror" gap of weapons in the following sequence. Open or remove the receiver cover. Remove the recoil (return) spring. Move the bolt carrier backward. Insert a no-go cartridge gauge in the chamber or in the bolt and shove the bolt carrier forward, applying the force indicated in repair documentation to its rear end. The bolt must not close the bore and fully lock when the cartridge gauge is in the chamber (determined from incomplete entry of the bolt camming lugs behind the receiver locking recesses). In this case the "mirror" gap is correctly adjusted.

If the bolt locks (determined from full entry of the bolt camming lugs into receiver locking recesses), models with a nonadjustable locking assembly are subject to repair and weapon models with an adjustable locking assembly (PKM, SGM) must be adjusted.

From our experience, the following procedure is best followed for adjusting the Kalashnikov machinegun locking assembly. Open the receiver cover. Remove the return spring. Move the barrel lock fully to the left. Drive out the barrel lock screw pin. Loosen the barrel lock screw one turn. Put the barrel lock in place. Insert a no-go cartridge gauge in the chamber or bolt and shove the bolt carrier forward with the force given in repair documentation (repeat the above operations until the bolt locks). Insert the barrel lock screw pin in place after first moving the lock to the left. Move the barrel lock fully to the right. In a machinegun adjusted in this manner the bolt should not lock if a no-go cartridge gauge is inserted in the chamber. Adjustment of the "mirror" gap ends here.

It is also necessary to check the amount of the "mirror" gap in preparing a weapon that has an adjustable locking assembly for firing. This work is done directly by the personnel. To check, open the receiver cover, shove the bolt carrier backward, insert a training round in the chamber and, holding the bolt carrier back, shove it to the extreme forward position with a force of approximately 150-350 N. If the bolt locks, an adjustment is made. To do this, gradually loosen the bolt lock screw (each time by one turn) until the bolt locks. After this tighten the bolt lock screw one turn and insert the screw pin. The return spring does not have to be removed.

The "mirror" gap must be adjusted in case stoppages connected with case rupture appear in firing. Depending on the situation, the adjustment can be made by the machinegunner either under the squad commander's observation or independently. The remaining part of the case is removed by an extractor. The "mirror" gap is adjusted using a cartridge case following the very same procedure as in preparing a weapon for firing.

**Far East MD Pilots on Performance of SU-27**

90UM0262B Moscow KRASNAYA ZVEZDA in  
Russian 28 Jan 90 First Edition p 2

[Article by Lieutenant Colonel V. Usoltsev: "Victory in the Air and Problems on the Ground"]

[Text] "The best fighter aircraft in the world" "Sky-blue lightning" ... Many complimentary epithets were bestowed on the strong and proud bird, the SU-27 fighter aircraft, at the air shows that took place in 1989. It is a delight to watch these aircraft take off and land. Although the fighter aircraft's main qualities are not displayed at the borders of the airport. But hundreds of kilometers from it, there, where military aviators hone their professional skills.

I asked the pilots who had just landed their "sky-blue lightnings" to describe one of the duels.

Military Pilot Second Class Captain A. Buzun, graduate of the Chernigovsk Higher Military Aviation School, said:

"I waited for the 'enemy's' appearance in the alert zone. I scanned the air space with both eyes: First a glance into the air and then at the radar screen. Anyway, information from the air combat control center about the appearance of the 'hostile' fighter aircraft forced me to be on guard. But as soon as I caught sight of the target blip on the onboard radar screen, I calmed down. And suddenly the warning system warned me about the missile attack being prepared. In order to thwart it, I accomplished a half roll followed by a split S while descending toward the 'enemy.' The concept of operations was to perform a rear-hemisphere approach while using an altitude advantage. The SU-27 easily followed the control stick. It is such an aircraft that at times it seems like the aircraft anticipates my thoughts and actions. And in this engagement it was as if we merged into a single unit. I seized the opportunity to open 'fire'"....

Military Pilot Third Class Senior Lieutenant V. Kopyshev, a graduate of Armavir Higher Military Pilot Aviation School, entered the conversation:

"I did not succeed in mounting a surprise attack against Buzun. He not only used an energetic maneuver to break off a simulated missile launch but he himself nearly came out at an advantageous position. By the way, I also did not count on an easy victory. Buzun is my flight section commander and you can anticipate just about anything from him during an engagement. While still preparing for the sortie, I prepared myself beforehand for high G-loads and for the most complex maneuvers.

"After my unsuccessful attack," continued Kopyshev, "I attempted to 'shake' Anatoliy off my tail. We reached 7 G's during the chandelle. At the upper point, I transitioned the fighter aircraft into a deep banked turn in the

hope that Buzun would not have time to repeat my maneuver and would race past and I would get a chance to attack."

"If I had not performed this variation on the ground, I would have fallen for Viktor's clever maneuver. Imagine," Buzun drew a diagram of the engagement, "when my eyes started to close from the G-load. Kopyshev turned in such a hook that in one more instant he would have been in my rear hemisphere. Well, I nearly impaled my fighter aircraft on a stake in order to slow down. The science that Hero of the Soviet Union Viktor Pugachev has shared with military pilots was useful. We have his 'Cobra' in our inventory.

"Before the SU-27, I flew other types of aircraft. They were good fighter aircraft. But they cannot compare with it. It is highly maneuverable with a high engine power reserve. The entire SU-27 was created for battle. And what is very valuable in it is accessible to pilots with little professional experience. I think that soon the 'Cobra' will become the common property of many of us. At the very least, there are already pilots in the regiment who are prepared to add this technique to their arsenals. If only they were authorized [to use it]. Yes and the 'Cobra' is not the last unusual aerobatic maneuver that can be performed in the SU-27. Well, what did we accomplish during the engagement? After coming out of the banked turn, Kopyshev was nevertheless in my sights. However, it is becoming more difficult for me to bring him to bay with each flight. Viktor is trying and he is displaying initiative, and on the ground he thinks about what he will do in the air. Given the opportunity to fly a bit more, Viktor would already become an outstanding military aviator in the near future."

"I instinctively sensed," said Kopyshev, "when Anatoliy 'launched' the missile. I would have been shot down in an actual engagement and I would have managed to eject. But even in a training [situation], it is a somewhat uncomfortable feeling. But I can never give up: In our training engagement, the pilot who wins the engagement is the one who carries out the greatest number of photo launches during the operations time in the zone. Only how do I break away from Buzun?"

"The plan comes to me instantaneously: I turned on the afterburner, pulled the control stick back towards me, and headed directly into the sun. Major Kravchenko taught me that maneuver. But the very thought exasperates me: Did he break off or not?"

"The sensation of victory," agrees Buzun, "even if it is short-lived is relaxing. That is how it occurred with me after the successful attack. When Viktor led his aircraft into an oblique loop toward the sun, I was late rushing after him and lost sight of him for a moment. And then there were also a ray of sun light that poured in, spots of reflected light played on the cockpit canopy, and even a light filter could not save me from them."

"In short, Kopyshev got away from me. Soon, I myself turned out to be in the role of 'the one shot down.' And

the fighter aircraft and I had to get tied into a knot in order to break away from the 'enemy.' I was drenched, it was as if I had been in the stuffy [air] and there were still so many minutes of battle ahead.... By the way," the pilot smiled, " I can talk about this forever....

"An engagement, if you look at it from the ground, is a pattern of varied tactical techniques. In the air, it is the pilot's instantaneous reaction to a change in the situation, the sequence of numerous G-loads when blood first beats like a wave to the head then it all gathers somewhere near the heels. Not everyone can withstand this without training. And the SU-27 fighter aircraft with limitations removed from it, pilot, keep track of your health, and I will not put you [in a position to be] engaged."

The more experienced Captain Buzun won this duel. He carried out five successful attacks. Sr Lt Kopyshev had four of them. I see that both pilots are satisfied with the engagement. However to the happiness from a rendezvous with the sky—a feeling, known perhaps only to aviators, something has been added that is a little like a spoon disappearing in a barrel of honey, dissatisfaction that has taken shape in the regiment with the state of affairs of combat training. By the way, other officers also told me about this.

Let us take these same flying hours. It is clear to everyone that a pilot lives precisely to fly. Flights allow him to grow as a professional and to maintain the proper level of unit combat readiness. But in the regiment that has the SU-27 fighter aircraft in its inventory, not everyone has even accomplished the minimum prescribed by regulations. These pilots are not combat ready. They are

experiencing a significant drop in morale and also sense their inferiority in that that their years in seniority will be less by a factor of two than their comrades. Why did this occur if the combat training plan stipulates required flying hours for each year? Why is it the same as a year ago when certain pilots' class certifications were under threat of decertification? For example, the same Captain Buzun who in 1988 for reasons that had nothing to do with him could not certify as a 2nd class. Incidentally, is it not strange that during six years in a combat regiment a pilot could not obtain 1st [class]? What impediments are holding up his professional growth? Captain Buzun doubts, as do others among his coworkers, that he will succeed in maintaining his achieved level. Most likely, they will automatically become Pilots 3rd class. The prospects are unenviable: To once again pass through the entire program and pass examinations to attain classes they have already held. And, in other words, this is simply a slippage in combat training.

The unit commanding officer explains the state of affairs through a shortage of aircraft. But, in my opinion, this occurred to a greater degree due to organizational disorder and [poor] combat training plans.

It will not be an exaggeration if I tell you that the unit pilots climbing into the sky today are inherently the category of people who are selflessly devoted to their profession, have a genuine love of the SU-27 aircraft, and hope that everything will change for the better in their lives on the ground.

In the regiment, I did not hear: Everything depends on higher headquarters. Maybe, there, having read this article, they will take note not only of pilots' victories in the air but will also ponder their earthly problems.

**Reduction Leads to Excess Junior Officers in Northern Fleet**

90UM0292A Moscow KRASNAYA ZVEZDA in Russian  
8 Feb 90 p 2

[Article by Vice Admiral Ye. Yermakov, Chief of Naval Cadres Directorate: "Fates of Lieutenants"]

[Text] The questions in the article "Feast or Famine" (KRASNAYA ZVEZDA, January 6, 1990) about 1989 naval school graduate placement in the Northern Fleet posed by the author as fact correspond to reality. Graduates are being sent to the Fleet in numbers that exceed requirements in a number of specialties. However, the causes of this phenomenon are more profound than the planning miscalculations assumed by the author of the article. And unless we can understand Captain-Lieutenant I. Lysenko's lack of knowledge, there is no way that we can justify the position of Captain 1st Rank Ye. Koshelev who must know through duty and service experience how and why this 1989 graduate placement problem arose that is a serious problem both for the Northern Fleet in particular and for the Navy as a whole. And this is not only a problem for the Navy. In accordance with USSR Minister of Defense instructions, we are authorized to maintain officers on staff for up to one year with payment of their entire monetary pay and allowances in accordance with their previous position. This extraordinary measure has been adopted in accordance with a government resolution in order to resolve the fates of officers within a year without infringing upon their rights.

I must also direct the attention of the author of the article "Feast or Famine" and all Northern Fleet officers who participated in the preparation of these materials to the need for caution in statements about such a complex issue so that the uninitiated reader does not form the impression that the problem grew out of nothing and that it will be solved very easily—with a stroke of the pen on the plan.

Calculations of officer personnel requirements are conducted at the Naval Cadres Directorate, based on modern mathematical methods using computer technology in accordance with a methodology approved by the USSR Armed Forces General Staff. Initial data for the calculations are based upon the Navy's shipbuilding program, organizational measures for the five-year plan and for the current year, future plans for development of weapons, combat equipment, and others. Annual naval school cadre selection plans are the result of quite voluminous calculations.

Since five years pass from the moment cadets are accepted into the first year until their graduation, the accuracy of the calculations depends to a significant degree on the reliability of initial data. Cadets who graduated in 1989 were accepted into the first year in 1984. At that time, all sources indicated growth of all Naval branches including development of missile weapons. At that time we could neither predict radical

changes in military doctrine nor significant Armed Forces reductions that substantially changed the Navy's authorized organizational manning structure and Fleet requirements for school graduates.

The experience of personnel work demonstrates that any massive measures that change the size of the Armed Forces result in aggravation of personnel problems. Some specialties are being significantly reduced, others are being reduced to a lesser degree, and still others are being significantly increased.

This situation confirms the experience of the 1961 reductions whose negative consequences affected the state of the officer corps right up until the 1980's.

After announcement of the decisions and receipt of General Staff directives on reduction of the size of the Navy, calculations of officer personnel requirements were conducted for each specialty for the year and at the end of the reductions. It was already obvious at the beginning of 1989 that naval school graduates would arrive in numbers that exceeded requirements in individual specialties. Of course, we could resolve the problem which has arisen in the simplest way by releasing "excess" young lieutenants into the reserve when they graduate from school. However, it would have quite difficult to bring ourselves to that step. Would many people have remained satisfied with our decision? I think very few [would have]. After comprehensive study of this issue by the Naval Cadres Directorate, the Naval Political Directorate, Naval school staffs and other interested directorates, the Navy Chief of Staff decided to send all graduates to the fleets with subsequent future assignment to positions in accordance with the specialist training received.

This year the Navy is faced with this same dilemma. And it will obviously be faced with this problem until 1993 since cadets have already been accepted for training in accordance with previously conducted calculations. The Naval Cadres Directorate is taking steps to correct plans and is searching for the most painless solutions to this problem. In particular, already in 1989 a portion of the graduates with non-shortage specialties for the Navy were assigned to other branches of the Armed Forces and 45 graduates were retrained into related specialties. However, retraining possibilities are limited to "related" specialties. It really is impossible to retrain a missileer to be an engineer or a chemist to be a computer specialist for which there are requirements in a compressed time period. This is also impeded by resistance of many commanders and task force Cadres agencies that consider (and this is very well-founded) retrained graduates to be inadequately qualified specialists.

We must also consider the positions of the retrained graduates themselves. Having studied at a school for five years, they have become fond of their specialties. Several months of retraining cannot provide required skills and self-confidence.

We are concerned about the positions of certain task force commanders and Cadres agency workers who, while being aware of all of the complications with school graduate placement, want to shift the burden to someone else's shoulders, that is, to another task force, to another fleet, etc. It is easiest of all to calculate how many graduates are assigned at a given moment in excess of requirements and how many shortages there are. At the same time, they do not think about manning positions throughout the entire year, do not conduct carefully thought out work on transferring officers who have served in the fleet for several years to central units, do not consider releasing officers who do not wish to serve and do not think about where they will obtain replacements in shortage specialties. Very much depends on work with graduates in the fleets, in task forces and units, and on ships.

Having reflected on this subject, I would like to thank the author of the article "Feast or Famine" for once again forcing us to think about the fates of young officers. And possibly to respond and share my thoughts with KRASNAYA ZVEZDA readers. This is really our common concern.

And, finally, About the naval school graduate mentioned in the article. First of all, it was difficult for us to find him since Yu. Alekseyev actually turned out to be Igor Yevgenyevich Alekseyev, a 1989 graduate with a ballistics specialty. Upon arrival in the Fleet on 15 August, Lieutenant I. Alekseyev was assigned at his personal request to a position as a laboratory engineer, that is, just over two weeks after his arrival and he was not interviewed at all. Right now he is serving in that same position, he is satisfied with it, and he is not raising the issue of being assigned to a submarine. Furthermore, Captain 2nd Rank V. Mayevskiy, Chief of the Cadres section, reported that the issue of assigning Lieutenant I. Alekseyev to the electromechanical division was never raised.

It is understandable that all of these inaccuracies are trifles in comparison with the problem being examined. However, it is unfortunate that recently too many problems are the result of a disdainful attitude toward apparent trifles.

FROM THE EDITOR: We also think that correspondence about "Feast or Famine" has been useful at the very least since it is promoting a lively dialogue and increasing mutual understanding between the Naval Cadres Directorate and Fleet Cadres agencies.

**'Curious' Civilian Assignment of Construction Troops Noted**  
*90UM0248A Moscow KRASNAYA ZVEZDA in Russian*  
*21 January 1990 1st Edition p 4*

[Article by Maj M. Syrtlanov: "We continue the topic": "Free Slave Labor"]

[Text] Recently we publicized a number of materials which discussed how several civilian agencies and institutions were "getting on" in the form of free labor from military construction troops. Here's yet another fact.

Every morning in the building at 9 Sadovo-Kudrinskaya Street, along with students from the evening and correspondence sections of the Moscow Higher Party School (VPSH), enter a few... military construction troops. In the VPSH, as it became clear, they do everything from washing dishes in the cafeteria to cleaning up the auditoria.

But how curious an issue this turned out to be: all of them were ordered to the capital from military construction subunits, transferred to the USSR Ministry for Hydroconstruction and stationed... more than a thousand versts from the Sadovo Ring. Hence, Private V. Pisarchuk came from the Stavropol Region to maintain the academic facilities of the VPSH, and Private A. Simonavichus from Saratov, Private A. Korshunov from the southern parts of Kazakhstan.

"No, I never expected or dreamt I'd be doing this," says Private Pisarchuk. "I served half a year, but didn't master any specialty."

I ask the pro-rector of the Higher Party School, who was incidentally an officer in the past, to comment on this monologue. Reserve Major A. Kabanov recognizes the moral costs of using a person in uniform in a non-prescribed manner, but at the same time finds a rational core to what had become a complex situation. On one hand, his institution always has auxiliary workers "to snatch up", and non-grumblers and conscientious ones. And the officers from the corresponding Directorate for military construction units assigned to the USSR Ministry for Hydroconstruction received for this an admission to the cafeteria of the VPSH.

"Our own kind of patronage, really, can't you see?" explained Alexandr Timofeyevich.

I decided to turn right to the chiefs of the military construction troops, considering that the directorate mentioned above was located in the neighborhood. However vexing, this whole thing occurred with the consent of the Directorate Chief, Major General I. Khamaza.

One has to give Ivan Nikolayevich his due—he did not shift responsibility off himself, or pass it onto the shoulders of others, although, as it was explained, such practices have gone on long before his appointment to responsibility.

**Col Gen Babyev on Assistance to Dependents  
Leaving Azerbaijan**

*90UM0265B KRASNAYA ZVEZDA in Russian  
30 Jan 90 First Edition p 1*

[Unattributed Article: "Help Is Arriving in Time"]

[Text] Colonel General V.N. Babyev, chief of the Ministry of Defense Central Finance Directorate, answers our correspondent's questions about the work being conducted in the USSR Ministry of Defense to assist members of servicemen's families who were forced to abandon their permanent residences in Azerbaijan SSR.

Since the first day of the evacuation, the USSR Ministry of Defense has been assisting families of servicemen who were forced to abandon their homes. For this purpose, reception facilities have been organized and a network of disbursing points has been deployed at airports, train stations, and at other locations where people are arriving. A mobile disbursing point has been established in the event of unforeseen circumstances. At reception facilities, evacuees are provided with food, monetary grants, and when necessary, clothing and shoes. Servicemen's families are accommodated in dormitories and other housing on military posts. The issues of bringing servicemen's families to selected temporary residence locations are being efficiently resolved. All of them are being provided with military travel documents for free passage by rail. They are being assisted in acquiring tickets.

Besides the aid rendered to evacuated wives and children at reception facilities, a one-time monetary grant of 100 rubles is being paid to each person and those needing it are assisted in acquiring clothing, shoes, and other necessities at a cost of up to 200 rubles per person.

A decision has been made to maintain the average salary for family members of servicemen and women who are undergoing active military service or who work in military units. The average salary will be paid from the day work was terminated until the moment of job placement but for no more than six months and those accommodated in sanitary institutions will be paid 50 percent of their average salary.

Sums from VTsSPS [All-Union Central Trade-Union Council], the Soviet Peace Fund, other social organizations, military collectives, enterprises, institutions, individual citizens of the USSR, servicemen, and veterans of the Army and Navy are coming into the fund of USSR Gosbank [State Bank] USSR Gosbudzhet [State Budget] Cash Execution Administration to aid families of servicemen evacuated from Azerbaijan SSR and are being deposited in USSR Ministry of Defense Central Finance Directorate Account No. 140274.

**TYL VOORUZHENNYKH SIL: 1989 Index of  
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[Text]

**EDITORIALS AND GENERAL POLITICAL  
ARTICLES**

The Reference Point: Quality Parameters—V. Arkhipov.....	2
A Time of Crucial Matters—V. Arkhipov .....	12
Alert Duty and Living conditions—I. Tretyak.....	8
Democracy and the Military Collective—A. Shakhov..	7
Toward New Achievements.....	1
The Technical Caliber of the Rear Service Specialist...3	3
New Agrarian Policy .....	4
The Great Truth of the Victory.....	5
The Officer's Living Conditions.....	6
On the Congress Course, on the Restructuring Course.7	7
At a Turning Point.....	10
Where There is Initiative, There Is Success.....11	11

**On the Restructuring Course**

Once More About Window-Dressing—N. Artamonov, E. Frolenkov .....	6
The Finance Service in the Conservation Mode—B. Babyev .....	10
When the Approach Is Individual—G. Berik .....	2
Step up the Pace of Construction—V. Brezhnev.....5	5
In Search of Innovation—V. Dmitriyev.....12	12
Thrift—in Everything—A. Makunin .....	6
There Is Work to do Everywhere—G. Mokryak.....11	11
We Live as a Single Family—P. Stankovich .....	9
The Criterion is Effectiveness—G. Stafanovskiy.....4	4
Change the Management Style—A. Stolyarov .....	11
The Primary [Organization]: A Time of Change—V. Timonin .....	1
International Brotherhood of Fightingmen—Ye. Ushakov.....8	8
Prevent Running Off the Road—V. Khodanovskiy ....3	3

Based on Political Methods of Leadership—N. Chernyshев ..... 10

For the Military Sovkhozes—New Management Methods ..... 5

#### At the Crossroad of Opinions

The Other Side of the Medal—N. Bagriy ..... 9

Are They Learning the Lessons of Afghanistan?—V. Boyko ..... 7

Time to Make Decisions—N. Buganov ..... 4

To Remain Silent Is to Indulge the Foes of the Restructuring—A. Vshivtsev ..... 12

The Labor Collective Should Decide—V. Dmitriyev ..... 6

And the Matter Is at a Standstill—V. Dukhanin ..... 6

They Plan From "What Has Been Achieved"—A. Yevseyenko ..... 10

"What Can it Do, This Commission?"—K. Ilyushchin ..... 11

According to the End Result—V. Kolchin ..... 9

From the Word "However"—V. Kondriyanenko ..... 1

Stricter Screening for the Rear Service School—V. Korobko ..... 5

And the Problem Was Chronic...—Ye. Kurtik ..... 1

And This Is the State Approach?—B. Likhterman ..... 12

The Fruits of Irresponsibility—A. Nersterkin ..... 2

Enthusiasm Alone Is Not Enough...—N. Nikulin ..... 3

But We Are Talking About Quality...—V. Ostapchuk ..... 3

Are Burnouts So Inevitable?—D. Pavlov, P. Terentyev ..... 4

Closer to Reality—V. Pekar ..... 5

Formally, Normally—A. Sabristov ..... 8

Think Together, Work Together—V. Slepukhov ..... 9

The Main Thing Is Efficiency and Control—M. Smirnov ..... 9

In the Vice of Bans—V. Tarasov ..... 6

Closer to Life—V. Fomin ..... 2

How to Simplify Accounting—I. Khvedorets ..... 7

In the Vice of Paragraphs—M. Cherkasov ..... 1

So That Words and Deeds Do Not Diverge—Yu. Chubenko ..... 10

And Profits Will Not Be Excessive—V. Yurochkin ..... 8

#### The Publicist's Column

Don't Wait For Instructions—Ye. Matveyev ..... 1

No Justification Whatsoever—Ye. Matveyev ..... 7

The Shoulder of a Superior—Ye. Matveyev ..... 9

Nothing More Sacred...—Ye. Matveyev ..... 12

Eliminating Abuse by Seniors—O. Sedykh ..... 5

Where Does the Lieutenant Live?—O. Sedykh ..... 11

Not Be A Prisoner to Inertia—Yu. Sergeyev ..... 3

The Officer in the Collective—A. Uzhegov ..... 2

What Mark Will You Leave?—A. Uzhegov ..... 10

According to the Laws of Honor—R. Chekmarev ..... 8

Generous Clients... and a Price of a Small Percentage—Ye. Chumakov ..... 4

The Official and the Individual—Ye. Chumakov ..... 6

#### COMBAT, POLITICAL AND SPECIAL TRAINING

Military Road Support in a Defense—V. Arkhipov ..... 3

Injuries Can Be Prevented—A. Beltsev ..... 9

The Duty Man at the Rear Services Control Point Erred.... Why?—B. Belokhvost ..... 10

Review of the Officer Ranks—T. Berdnikov ..... 4

Routine Matters Have no Place in the Training—A. Bobrovskiy ..... 6

A Plan—Not for the Sake of a Plan—V. Yelmanov ..... 9

How Can the Use of the obmo [Separate Support Battalion] Be Regulated?—G. Yelchishchev ..... 2

The Competition Was Held: What Now?—V. Yereshkin, E. Frolenkov ..... 11

Comprehensive Handling of the Rear Support Missions—V. Zdanovich ..... 1

The Battalion Took up a Defense—A. Zuyev ..... 11

The Field Exercise—What Should it Be Like?—N. Ivanenko ..... 12

Improving the Control and command Style—M. Kovalenkov ..... 2

The Commander and the Fightingmen's Living Conditions—A. Kovtunov ..... 3

For the Officer Training—Quality—A. Klimov, V. Vorsin ..... 8

On a Stripped Thread—V. Kolbenkov ..... 2

Who Will Head the Crews?—V. Kolbenkov ..... 11

So That Trouble Does Not Take Us by Surprise—V. Litvinov ..... 3

Troop Support: The Territorial Principle—L. Morozov ..... 12

Protecting Nature Is Protecting the Homeland—G. Nikitin ..... 5

Get to Know the People and You Will Acquire Strength—N. Nikonenko ..... 4

On the Ocean Frontiers—V. Sidorov ..... 7

Combat Does Not Forgive Routine—S. Smeshko ..... 9

In a Mine Situation—A. Sukhobetskiy ..... 8

Combat Duty Is Guard Duty—P. Sysoyev ..... 1

What it Takes Is Training—E. Frolenkov ..... 1

#### **At the Military Academies and Schools**

Introducing the New Methods—K. Baranskiy ..... 2

Unfetter the Instructor's Initiative—V. Listopadnyy ..... 6

#### **Reform at Rear Services VUZs: Ways and Problems**

There Is Something to Work on—S. Zhavoronkov ..... 12

In Order to Accelerate the Development—V. Ivashchenko ..... 7

How to Raise the Prestige of the Training—I. Ilyushchenko ..... 10

Is That What They Taught Us?—P. Karpov ..... 10

Reject Stereotypes—A. Lepeshenkov ..... 3

Is That How We Train Engineers?—V. Sazonov ..... 5

From the School of Memory to the School of Scientific Thinking—Ye. Sizov, F. Gusarov ..... 8

#### **The Field—A School of Skill**

Ammunition Delivered on Schedule—N. Klimov ..... 8

His Decision... Unconventional—V. Lugovtsev ..... 10

Combat Experience Helped—V. Ryabichenko ..... 2

Readiness Is Tested in Combat—V. Sadovnichenko ..... 5

The Medical Battalion's Everyday Military Work—A. Eysmont ..... 6

#### **Combat Readiness: The Qualitative parameters**

With Reduced Manning—V. Astakhov ..... 11

Combat Readiness: The Qualitative Parameters—V. Boyko ..... 1

What Is Hampering the Conversion to an Industrial Basis?—V. Gubanov ..... 4

The Crucial Factors—P. Kostyuk ..... 9

Night Flights in the Regiment—Zh. Kuznechenko ..... 12

To Gain Time—N. Maslikov ..... 2

Without the Preconditions for Flight Accidents—V. Obukhov ..... 7

Don't Wait to Be Instructed—V. Solonchuk ..... 8

If the Quest Is Creative...—S. Staroshchuk ..... 6

In the Shadow of the Production Process—M. Shilov ..... 3

Not Just Atomatomism of Action...—M. Yanovich ..... 5

#### **Rear Support Discipline**

Operations of Small Groups on Separate Axes—S. Agafonov ..... 7

As in a War—P. Korotkikh ..... 4

The Ocean Makes the Evaluation—A. Prasol ..... 10

A Fire: Whose Fault?—V. Savkov ..... 7

Under the Conditions of the Transbaykal—V. Sarkisyan ..... 9

Loading the Train—A. Tekuchev ..... 6

#### **For Those Who conduct the Classes**

Combat Coordination of the Medical Battalion—G. Dunin ..... 7

How to Achieve Coordination Among the Pipeline Workers—V. Terekhin ..... 12

In the Special Tactical Exercise—A PMKhO [Mobile Shop for the Chemical Decontamination of Clothing]—I. Chechetko, A. Shvets ..... 4

#### **Glossary of Rear Service Terms**

Basic Unit of Fire ..... 11

Veterinary Service ..... 5

Railhead Line Section ..... 3

Division Supply Head (DOP) ..... 3

Division Consolidated Depot (DOS) ..... 3

Supply Echelon ..... 1

Quartermaster ..... 7

Quartermaster Sergeant ..... 1

Expenditure Limit ..... 6

Financial Liability ..... 2

Military Transportation Service (VOSO) ..... 11

Large and Small Bakeries ..... 6

<b>This Was During the War Years</b>	
In Operation Bagration—A. Dobryakov .....	11
Liberating Sakhalin—N. Kobelev.....	1
To the Fire Position—A. Leychenko.....	12
Automotive Equipment Support—N. Pankov .....	12
Protecting Moscow—L. Radishevskiy, V. Vorsin .....	7
In Landing Operations—I. Shiyan .....	5
<b>From the Rear Service Chronicle</b>	
In the Ranks of the Decembrists—F. Ananyev, V. Messoyldi .....	12
Behind the Line in the Archival Document—N. Vdovin .....	7, 8, 9, 10
The Rear Service Staff During the War Years—I. Golushko, A. Yaremchenko .....	1, 2, 3, 4
A Talented Organizer—A. Dobryakov, A. Basurin .....	5
For the Needs of the Front—N. Komarov.....	8
A.I. Rykov, Representative Extraordinary of the Defense Council—V. Prilutskiy .....	2
People's Food Commissar—V. Prilutskiy .....	10
Special-Purpose Motor Vehicle Detachment—T. Svirenko.....	7
<b>People and Their Affairs</b>	
The Technology of Success—V. Kagakin .....	8
Afghanistan Was a Part of Destiny—V. Ognev .....	5
The "Inconvenient" Kladov—O. Sedykh .....	1
The Afghanistan School—E. Frolenkov .....	4
<b>Among Our Friends</b>	
How We Use Electronic Computers—Z. Soradi.....	6
Exchange of Know-How .....	8
<b>MATERIAL AND MEDICAL SUPPORT, FINANCING AND LIVING CONDITIONS OF THE FORCES</b>	
Navigation Nourishes the Year—A. Artemov .....	6
Concern For the Fightingmen/Internationalists—N. Bay.....	6
The Foundation of Unit Administration and Support—V. Bogachev.....	4
With Concern For Those Discharged Into the Reserve—V. Vorobyev .....	9
Rights Have Been Increased—We Need to Know How to Use Them—M. Gnatyuk .....	12
The Rayon Billeting Unit: What Is Preventing it From Operating in the New Way?—B. Golubtsov .....	6
In the Role of Stepchildren?—B. Golubtsov.....	9
The First Steps of Economic Accountability—N. Gryaznov .....	7
Veterinary Medicine and Military Hunting—A. Yegorov .....	8
What Causes the Losses?—V. Zverev .....	9
Economize on Living Conditions, Lose on Everything—A. Zimin .....	3
The Children Live in the BAM Towns....—V. Zuyev....	2
As Stepchildren of the Billeting Unit...—K. Ilyushchits.	3
And Winter Is Just Around the Corner—V. Keys.....	10
The Pluses and Minuses of the Contract—V. Keys....	11
Unit Messing: Problems, Ways to Improve it—N. Kozlov .....	10
Dilemmas in Supplying the Remote "Site"—P. Korytin .....	5
A Search Requires Creativity—A. Krivosheyev, V. Gromov .....	8
On the Path to Self-Support—Ye. Ksendzik.....	8
Learn How to Manage—G. Kurdakov .....	1
The New—Into the Life of the Garrisons—G. Kurdakov.....	11
Don't Bestow But Stimulate—P. Kuchma .....	7
Long-Awaited Changes—P. Maremukha.....	11
Does the Medic Need Economics?—V. Nayda.....	3
A Conflict—V. Nikodimov .....	11
Health Is in Our Hands—G. Novozhilov, B. Zholus .11	11
A Wall of Alienation—V. Pirozhok.....	4
It Is time For Change—Ye. Rodionov .....	5
For Military Trade—a Modern Base—N. Sadovnikov.5	5
Electronic Computers in Military Health Care—I. Sino-palnikov, V. Romanovskiy .....	12
Tourism Does Not Tolerate Complacency—V. Titov ..2	2
Grasping the Basics of Economics—P. Toloknov.....	9
The Soldier's Bread of Leninakan—V. Shurygin .....	3
<b>Recommendations of the All-Army Conference—Into Practice</b>	
The Provision of Amenities: Why Are There Problems?—Ye. Kulagin.....	2

The Architecture of the Military Post—P. Minostsev..1	On the Distant Approaches—the Optimum Mode.....10
Enlisted Men's Messhalls For the Southern Regions—P. Minostsev, A. Lysov, S. Khovrin .....	The Command and Control System—Time For Change
When it Is Begun Not Out of an Office—V. Pasyakin.5	A Well Considered Approach Is Needed—B. Kopytov.9
<b>Our Contribution to the Food Program</b>	
This Is How Success Is Achieved—N. Kravtsov .....	Together But... Separately—N. Makarenko .....
...They Used to Calculate the Losses—K. Pushkarev...1	One Cannot Embrace the Unembraceable—V. Maksimov.....7
<b>Combat Mismanagement!</b>	
Time to Plug up the Fountain—V. Antonov .....	Not With Numbers But With Quality—P. Mikhaylev .2
When the Fines Are Not a Problem—A. Vasilenko ...10	<b>The Regiment Food complex—Depot, Kettle, Table</b>
Effects and Defects—V. Dolgopolov, V. Antonov.....7	The Subsidiary [Farm] Is Gaining Strength...—V. Boyko.....12
Stained Glass Windows and Plaster Casts—B. Karpov.5	The Quality of the Mess Begins at the Depot—M. Vizir.....12
Eliminate Dragged-Out Construction Projects—A. Kolesnikov.....2	Greater Independence—A Greater Return—D. Galkin.....10
From Lack of Coordination—a Profusion of Problems—Ye. Kucherov .....	Management Aptitude—M. Guk, Yu. Pavlenko.....11
Polar Anomalies—I. Lazko.....11	The Norm—To Every Soldier—L. Zaika.....9
About a Stoic Odor and Unenviable Stoicism—N. Lisitsa .....	At Whose Will Is There Not Enough to Eat in the Field?—A. Kishinskiy .....
“And We Have Repairs...”—V. Mironov.1 A Pessimistic Comedy—Yu. Pavlov .....	6
Theft—I. Rakhmanin.....6	Milk in the Soldier's Mug—V. Kolbenikov .....
And the Inspectors Don't See it—M. Romanov .....	How to Inspect the Unit Subsidiary Farm—I. Kondratyev.....6
Ambition Got the Upper Hand—V. Ryndin .....	The Enlisted Men's Messhall—A Selection of Dishes—S. Maslov .....
A Closed Circle—O. Sarkisyan.....6	Produced by the Regiment Farm...—V. Nikulkov.....10
When Diversity Is Harmful—N. Safonov .....	When Control Is a Formality...—V. Timoshenko .....
Dangerous Trash—N. Safonov .....	7
Dull Colors of Everyday Life—V. Sergeyev.....9	What Reaches the Soldier?—E. Frolenkov .....
“Needed” People—V. Sergeyev.....12	The Potato Field—E. Frolenkov .....
What Changed After the Audit?—S. Smirnov .....	The Enlisted Men's Table Will Do the Evaluating—Ye. Chumakov.....8
Invisible Garrisons—I. Starkov, S. Kudryashov, G. Smolev .....	To the Messhall—Peeled Potatoes—Yu. Chebotarev...7
Generosity At the Expense of Others—V. Tishchenko.2	To Improve the Diet of the Sick—V. Shcherbina .....12
The “Convertible” Buckwheat—A. Tkachev .....	<b>Your Notebook</b>
“It Came to a Head...—Yu. Tkhakushinov .....	Briefly About Food Products.....7
Acts and Facts—M. Yanovich.....11	Where Does Manna Grow? .....
<b>In the Magazine's Economic Council</b>	
The Criterion Is Practice .....	A Manual—On the monitoring of Messing.....9
Military Kolkhozes—Reserves for Growth .....	Ethnic Dishes .....
	10, 11, 12
<b>The Competition for Best Garrison Living Conditions: The Third Phase</b>	
Success—In Coordinated Action—R. Askarov .....	9
We Build the Housing Ourselves—N. Gurov .....	8

Unnatural Difficulties—G. Ivanchikov, V. Kostomarov, V. Pirozhok .....	7	Upon Discharge Into the Reserve or Retirement.....	4
<b>Universal Economic Education—In Action</b>			
A Component of Competence—P. Veshchikov .....	2	Of Improved Material.....	4
The Administrative Investigation—How to conduct it— N. Kuznetsov, A. Pchelintsev .....	7	Who Should Keep the Records?.....	4
<b>Consultation, Advice and Recommendations</b>			
How to Make Better Use of Fertilizer— Yu. Borovikov .....	5	The Right to Special Travel Permits.....	4
How Can Secondary Resources Be Used?—V. Gubanov .....	12	Do We Need a Compilation of the Lectures?.....	4
New Things in the Equipment of Messhalls—A. Koblyanskiy, A. Zakharov .....	1	Is the Uniform Going to Be Changed?.....	5
Planning Food Support—A. Terekhin, A. Zakharov .....	5	What Should Be Done With the Leftover Checks?.....	5
<b>Attention—Experience!</b>			
What is “Kompleksion”?—A. Beynoras, Ye. Telishevskiy .....	4	Payment for Extra Work.....	5
The Boiler Has Become Economical—A. Beynoras .....	6	On financial Aid to Cooperative Members.....	5
The Repair Combine: Fur Coats For the Children—A. Grigorenko .....	8	According to the Summer Ration Norms .....	6
They Have Mechanized Vegetable Storage in the Unit— A. Lazarev, N. Danilenko .....	8	Recording the “Non-Rear Service” Property in the Battalion .....	6
With Their Own Forces—P. Melnik .....	2	Why Is Interest Not Paid? .....	6
The Store and the Storage Facility—Under One Roof— A. Parzhitskiy .....	12	Is the VUS [Military Occupational Specialty] going to Be Changed For the Reserve Officer?.....	6
Sheepskin Coats—From Byproducts—K. Pushkarev .....	9	On Cooperatives in the Armed Forces.....	6
A Dishwasher—B. Sanochkin .....	3	How Much Does Field Servicing Cost?.....	7
A Revolving Serving Line—G. Sardyko .....	1	If the Workday Is Not Standardized .....	7
Sausage Is Provided by... a Military Sovkhoz .....	7	Is it Necessary to Train an Extra Year? .....	7
<b>Question—Answer</b>			
Money Instead of the Food Ration .....	1	You Graduated From the VUZ With an “Excellent” ..	7
There Was a Cook in the Unit; There Was a Medic....	1	On Buying (Flomastery).....	7
The Subunit Commander and Fuel Records .....	1	VPD [Travel Orders] For a Wife’s Trip.....	8
The Use of Alcohol [Is Not Being Prevented] .....		Who Is Liable For the Dishes? .....	8
When Working Within the City Limits.....		On the Color of the Tankman’s Jacket .....	8
Clothing Repair.....	2	On Housing For Officers Discharged Into the Reserve .....	8
For Family Reasons .....	2	The Uniform... and Formalism .....	8
How Can Fuel Losses Be Reduced? .....	3	Changes in the Financing of the Troops .....	9
When Working With Flammable Materials .....	3	How Should the Contributions Be Applied? .....	9
Will Suspenders Be Introduced? .....	3	You Need a Pass to a Sanatorium.....	9
		Are the Expenses Covered? .....	10
		How Should We Dress the Female Military Personnel? .....	10
		Once More About the Permit.....	10
		Does the Father Have the Right to Benefits? .....	10
		Can One Become... the Supernumerary Commander of a Subunit?.....	11
		Is the Payment of Field Money Authorized? .....	11

A Kitchen or a Steam Room?.....	11
On the Modernization of Refueling Equipment .....	11
Is it Easy to Protect Oneself Against AIDS? .....	11
Discharged for Service Incompatibility.....	12
What Will Become of the KP[Field Kitchen]-130 Tomorrow? .....	12
The Livestock Specialist Needs to Know This.....	12
When the VPDs Are Not Used .....	12
I Want Monetary Compensation.....	12

**LINES OF COMMUNICATION, TRANSPORT,  
DELIVERY, TECHNICAL SUPPORT**

About Those Who Are en Route—S. Avralev .....	5
Toward the Power Engineering of the Future—S. Borisova.....	1
Oil Storage Facility of Synthetic Material—V. Bychkov, G. Zhuteyev.....	10
Electronic computers And the Training of Fuel Service Specialists—P. Vodnev, V. Yershov.....	3
At the Forefront—Quality—Yu. Vorontsov .....	4
Crane Operation Safety—V. Gatsulov .....	11
Onto an Unprepared Bank—S. Glyut .....	10
Regulated Technical Maintenance—L. Gribakov, A. Yelifanov .....	10
The Aviation Rear Service—on the Restructuring Route—A. Zakrevskiy.....	9
Safety Is Guaranteed, If...—A. Zakrevskiy .....	12
It Is Not a Matter of Efficiency Experts—V. Keys.....	3
The Track of the Pterodactyl—V. Kolbenkov .....	6
When Exercises Are Underway—V. Novikov.....	2
For Purity of the Sea—V. Pasyakin .....	4
The Airfield: Nontraditional Fire-Extinguishing Equip- ment—Ye. Ponimasov .....	8
If Everyone Makes a Contribution—M. Smirnov .....	1
Is Everything Going so Smoothly?—V. Starov .....	9
Creativity and Routine Are Incompatible—Ye. Gabachkov.....	5
Imperatives of Rapid Construction—V. Khimchenko, A. Dyachiin .....	8
Spur Tracks: Quality of Upkeep—M. Chizhikov .....	7
Congestion at the Crossings—M. Chizhikov .....	11

**Interviews on Current Subjects**

When it Was Necessary to Demonstrate Courage—V. Blokhin .....	6
“Those Accidents Did Not Have to Happen...”—R. Chekmarev .....	2

**Discussion of Information Science and Computers**

Computers at Headquarters for Military Communica- tions—V. Bril .....	6
Computers in the Training Process—Zh. Kizniyev .....	1
From the Simplest to the Programmable Calculator—V. Krivoshlykov .....	5
A PMK [programmable calculator] Will Help the Service Chief—A. Morozov, V. Koshcheyev .....	9

**Technical Information: The Innovators' Creativity**

How Are Electric Energy Outlays Calculated?—S. Kanyukov .....	10
Fire Hoses Last Longer—N. Mikhnyuk .....	5
Unit For Pumping Fuel Into Tanker Trucks—O. Nau- menko, V. Popov .....	8
Spans With Pin Joints—N. Okhrimenko .....	1
Keeping Fuel Records in the Field—B. Smolyanskiy...2	2
For Hanging Heavy Doors—S. Tulekov .....	1

**From the Exhibitor of Achievements of the National  
Economy of the USSR—Into Practice**

The Sovkhoz Is Engaged in an Experiment—K. Agafonova .....	4
For Ship Repair Needs—A. Vlasov.....	11
Based on the Experience of the Innovators—Yu. Kuznetsov .....	7
From the Idea to Introduction—More than Just a single Step—A. Nesmeyanov, V. Galin, K. Vuraki.....	9
Become a Mirror of the Restructuring—V. Sergeyev ...3	3
Experience Should Perform—R. Chekmarev .....	10
The Overlooked Stimulus—A. Yampolskiy .....	1

**Reviews, Surveys, Annotations**

A Valuable Aid For Rear Service Specialists—V. Vorsin .....	10
Chronicle of Rear Service Development—A. Yermakov .....	7
To the Commander on Unit Management—A. Zlain ..4	4
Urgent Urological Aid—S. Mirochitskiy, N. Kalugin...6	6

Strict Limits of the Law—N. Sakhnov.....	1
“The Military Finance and Economic...”—M. Smirnov .....	8
“Use of Fuel in Military Equipment”—R. Frolov .....	5

#### Letters to the Editor

According to the What-Is-Left-Over Principle—I. Abramkin.....	10
They Are Going Into the Army to Serve—S. Avtyukhov .....	10
The Paper Is Not Wrapping Paper—R. Baltrushaytis..	7
When the People’s Controllers Are Alert—A. Bobolovich.....	11
It Is a Matter of Video Equipment—I. Bogorad.....	3
Where Do We Get the Equipment For the TPU [Rear Services Control Point]—B. Bondarev .....	8
What Kind of Replenishment of Supplies Is This?—V. Bondarenko .....	7
How does One Make a Moisture-Proof Poster?—L. Bondar .....	9
Meals... in the Rain—V. Gorban.....	8
“First Aid” by... Agreement?—A. Zhukov .....	5
“We Acquire at Our Own Expense”—A. Ivanov, K. Anichkin .....	4
Oh For a Broom and Shovel—I. Isayev .....	5
Drowning in Water But Tortured by Thirst—V. Kilyanov .....	11
When the People Are Secondary—V. Kiskachi .....	10
Films—A Shortage?—A. Karpukov.....	2
And What About the Cooperatives?—N. Kolyvanov ..	9
How They “Rescued” the Cooks in the Unit—I. Kondratyev.....	5
Products Made of... Trimmings—L. Kosnov .....	6
And the Laundry Is Hundreds of Kilometers...—Ye. Koshelev .....	7
The Senior Man Was Left Out—V. Lavrenyuk .....	7
We Have Waited Years For An Apartment...—I. Lisovan .....	3
Rescued by... a Net—S. Martynyuk .....	7

A Snack Bar... for Show—M. Merkulov .....	1
Tankmen’s Jackets for... the Hospital—S. Mikhaylin...6	6
How to Save Dishes—N. Mordyasov.....	6
“But We Shall Win Thousands...”—A. Moroz .....	1
Who Should Be the Senior Man on the Vehicle?—Yu. Mutovkin.....	6
Changes... For the Worse—S. Naumchik .....	9
Perhaps There Should First Be Consultation—N. Okhotnikov.....	7
In Order Not to Sit Around on “Backup Crews”—S. Pavlenko .....	3
Every Fourth One—Without a Dress Blouse—N. Pitomets.....	9
“I Am Temporary Here”—Yu. Polezhayev .....	2
Chemical Reagent: Benefit and... Harm?—Yu. Polezhayev .....	4
When Will We Have Copiers?—A. Prokhorov .....	3
The Situation Needs to Be Corrected—D. Puzhitsker, S. Gorepekin, I. Nikolskiy .....	12
Convenience Is Not Provided...—N. Ryzhkov .....	4
Vexing Miscalculations—S. Sapega .....	2
Taking Into Account the Situation and Climatic Conditions—D. Sakharov .....	6
Bureaucracy in the Snares—S. Sochnev.....	1
Tapes... a Problem?—V. Tarasov .....	1
With Their Own Forces—S. Tulekov.....	11
Shipped Out and... Relieved of Responsibility—I. Khimera.....	10
Ordeal With an Apartment—V. Kholodilov .....	1
If the Conditions Are Provided—V. Chubach .....	2
And the Time Is Barely Enough—S. Shinkarenko, V. Puzankov .....	8

#### In the Armies of the Capitalist States

Technical Covering For Petroleum Product Lines—I. Danilchenko, Yu. Popov.....	8
Trends in the Improvement of Sectional Bridges—V. Zhelezkov .....	12
The U.S. Transport Command—V. Sokolov .....	3
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**Experimental Military-Patriotic Lyceum in Kolomna**

*90UM0264B Moscow KRASNAYA ZVEZDA in Russian 28 Jan 90 First Edition p 2*

[Article by KRASNAYA ZVEZDA correspondent Capt 3rd Rank V. Yermolin: "From 'Young Armymen' to Lyceum Students? 'Otechestvo' Youth Patriotic Education Center in Kolomna Aspires to Create Lyceum"; first paragraph is KRASNAYA ZVEZDA introduction]

[Text] In this time of liberated initiative and wild flights of fancy, there is no shortage of original ideas. The rebirth of a lyceum education—in essence a national spiritual education—may seem to some people to be an idea that is noble and attractive, but at the same time abstract and idealistic. They may remark that it sounds nice to say "lyceum" and "lyceum student," but this is not for our severe life, with the shortage of ordinary schools and ordinary teachers, with everything being in short supply: notebooks, kindness, faith. Be that as it may, here, in ancient Kolomna, the first steps have actually been taken to organize an experimental lyceum-type boarding school.

There is a reason why this idea came into being. Interesting experience of a military-patriotic nature has been gained in the city. The "Young Armymen" club that was started several years ago has become an association of clubs. It has been discussed on Central Television and written about in newspapers. The journalists have had their say, and the life of the "Young Armymen" has continued on its normal course, with the ranks filled without fail, always by volunteers.

At the present time, more than 800 adolescents are participating in the Young Armymen training. What does it have to offer? In a nutshell: spiritual, mental, and physical training of the young man. The boys study the country's history; work on the restoration of architectural and historical monuments; participate in evenings of music and poetry; learn hand-to-hand combat; perform parachute jumps; make trips to the mountains; go on water cruises; and carry out search operations. The club receives encouragement and support in many of its undertakings from cadets of the Kolomna Higher Artillery Command School imeni October Revolution. There is a reason why nearly every third Kolomna pupil applies for entrance to the school.

The council chairman of the "Young Armymen" military-patriotic club is a Kolomna Pedagogical Institute instructor—Aleksandr Borisovich Surkov. This year he will be 40 years old. He was born in the village of Lystsevo, Kolomenskiy Rayon. After graduating from the pedagogical institute (Foreign Language Department), he completed a period of compulsory service in the Air Defense Forces. He subsequently taught Russian for three years at a lycée in Limoges (France). Incidentally, Aleksandr Borisovich returned from France as the holder of a brown belt in karate. He has been working with "Young Armymen" boys since 1985.

In our conversation, Aleksandr Borisovich brought up the subject of "First Blood," the film that has caused quite a stir.

"We never did have the kind of 'Heat Lightning' depicted in the film," he said. "What is shown is some manner of malicious parody thought up by someone who is unfamiliar with the matter. Our boys laughed as they watched the machinations. Perhaps something like that can happen, but only if military-patriotic education is in the hands of dilettantes and casual Young Pioneer leaders. Our cross-country running, military games, and wrestling matches teach equanimity and self-control; inculcate readiness to step in and help a comrade and protect the weak; be stalwart when facing a challenge."

I heard stories of how some leaders in youth clubs of a military-sports orientation were clamoring for emphasizing physical development at the expense of the spiritual, serious in their conviction that steel muscles and stamina per se are a guarantee of spiritual health. Surkov has nothing to do with such empty opposing views. In his opinion, a person in harmony with himself is a citizen who possesses a developed awareness of his Fatherland. Hence the style of educating the "Young Armymen": an amalgamation of physical training (hand-to-hand combat, cross-country running, physical conditioning) and discussions on our history, reading of poetry, evenings of music, etc.

Initiation into the "Young Armymen" is entirely devoid of formalities. This amounts to nothing more than Surkov's taking recruits to the Dubosekovo Railroad Station every year on 12 November, the place of the legendary deed performed by the Panfilov fighters. Why there, instead of to some other memorable place associated with the Battle of Moscow?

"I want the boys to keep in memory how Russians, Kazakhs, Uzbeks, and Armenians fought shoulder to shoulder for the Motherland," said Aleksandr Borisovich. "It seems to me that when a person stands on ground where a great deed was accomplished, he reviews everything in his mind. His feelings are sharper and his thoughts clearer."

Incidentally, the Kolomna "Young Armymen" studying Russian antiquity, Russian culture, and traditions and customs of the Russian people, acquire respect for the culture of other peoples. It is on their initiative that adolescents from patriotic formations in Latvia, Kazakhstan, and Moldavia are appearing in numbers in the annual defense-sports camp event. I hope that with time this kind of international camp will rally under its banners representatives from all the country's republics.

"How do I envision the 'Kolomna' Lyceum?", Surkov repeated. "I envision it as an educational institution in which there would be free development of the intellectual, creative, and physical inclinations of adolescents. The main purpose would be the training of morally fit citizens that are able to participate in perestroika at a strategic level."

Constituting the basis of the educational program are general education subjects. However, teaching is conducted only by means of the techniques employed by the lyceum's pedagogical collective. In addition, the following non-elective subjects will be introduced: everyday life and culture (grades 1-10); logic (grades 7-10); rhetoric (grades 8-10); pedagogy and general psychology (grades 7-9); ecology (grades 1-10); history of religion and atheism (grades 5-10). It is proposed to organize circles and activities: choral music; choreography; elocution; musical culture; poetry reading; old Russian cooking; home economics and "man of the house"; ancient trades; fencing; horsemanship; ancient forms of one-on-one combat; Hatha Yoga; programming and computerization; fundamentals of scientific research; Latin; philosophy; and others. Plus a number of circles, sections, and special interest clubs.

"The lyceum will be housed in the Staro-Golutvin Monastery of the Epiphany," continued Surkov. "We selected this place on purpose. For six centuries the monastery has stood on a neck of land between the Moscow and Oka rivers. In olden times it served as an outpost for Moscow, protecting the latter from raids by uninvited guests. The monastery was founded by Grand Duke of Moscow and Vladimir Dmitriy Donskoy and his spiritual ally, Sergius of Radonezh. So that in our time let the monastery become an outpost of the struggle for man."

Aleksandr Borisovich spoke of our life being invaded by dark forces of violence, cruelty, pornography, the primitive in music and art, social cynicism, moral savagery, and loss of spiritual values that were revered by the people for centuries. Are we to use the mighty walls to shut out all of this in order to preserve in the soul the ability to serve the Fatherland? Yes and no. It is not a question of monastic seclusion; the lyceum students will be just as active in social life as "Young Armymen." It seems to me that this is a case where indeed the "walls help" to preserve and bring back that which does not occur to many of us in the rush of living.

Practical implementation of the lyceum education concept became a reality for A. Surkov and persons of like mind only in 1988, when there was created at the Kolomna gorkom of the VLKSM [All-Union Communist Youth League] the "Otechestvo" Patriotic Education Center.

In addition to the 14 branches making up Otechestvo, the latter also includes the "Young Dzerzhinets" and "Kaskad" patriotism-oriented clubs, "Don Quixote" Search Troop (which deserves substantial discussion rather than mere mention), a youth local history club, and several other patriotic associations and special interest clubs. The Center has a staff of workers and a cost-accountable architectural restoration section. The latter has been organized for the purpose of restoring the Staro-Golutvin Monastery of the Epiphany. Having taken on this responsibility, "Otechestvo" realizes that more than mere enthusiasm on the part of adolescents is

required. Needed is a qualified, careful approach to restoration of ruins, to the construction of useful structures.

I arrived at the "Otechestvo" center while a symposium was in progress, the topic being a matter pressing for our time: pre-election campaign problems. Ten "Otechestvo" members are candidates for people's deputy of the city and oblast soviets, while the inspirer and ideology teacher for the Kolomna "Young Armymen"—Aleksandr Borisovich Surkov—is struggling to obtain an RSFSR people's deputy mandate from the Kolomna Territorial Electoral District. Thus, there was more than enough reason to hold the symposium. If the Center were to occupy a place in the organs of authority, especially of the republic, this would virtually guarantee success of the concept. This is a case where it is desired to make progress not by relying on someone's kindness, but by the sole application of efforts of the interested persons. Incidentally, in the beginning it will be essential to solicit external assistance.

Large sums of money and enormous efforts will be required to restore and reconstruct the boarding school of the Staro-Golutvin Monastery of the Epiphany, which has lapsed into pitiful condition in the last few decades. The responsible secretary of the Kolomna division of the All-Russian Society for the Protection of Historical and Cultural Monuments, Zinaida Andreyevna Kosheleva, told me that the transfer of the monastery to "Otechestvo" is indeed a good thing, in that it raises hopes of restoring an historical and cultural monument, but she wonders if this will become a long-term construction project, and can sources of financing be found.

Andrey Maksimov, the director of the "Otechestvo" center, remarked with a bit of irony that all the persons contacted expressed a willingness to cooperate as much as possible, but the mere mention of the word "money" was sufficient to cause the "willingness to cooperate" to evaporate instantly. The center also appealed to social organizations. For example, the Soviet Cultural Fund in the person of A. Mikheykin, deputy chief of the Social Initiative Department, promised all kinds of assistance—as long as it is limited to moral support. The Children's Fund imeni V.I. Lenin is also in no hurry to respond to the initiative. At the same time, no one disputes the fact that man can take care of the temple, and the temple can take care of man. It may be that this is especially true of our children, whose spiritual blockade is being further lifted with each passing day.

"We have no intention of becoming a burden to the state or anyone else," said Maksimov. "We hope to pay our own way by means of the lyceum's shops. For example, when the boys master blacksmith's work, this will become a source of income. We also intend to open a number of other shops, mainly the kind that would bring back dying trades—the ones needed today to carry out restoration and regeneration work. However, that is in the future. What we need now is financial support."

All who desire to render material assistance to the undertaking of the Kolomna people can contact the following: "Otechestvo" Youth Patriotic Education Center, Current Account No 700548, USSR Zhilsotsbank, Kolomna Division, MFO No 211714.

*(The author of this article is donating his fee to the "Otechestvo" center.)*

**'Defense Physical Fitness Training' Program to Replace Pre-Draft Training**

90UM0291B Moscow KRASNAYA ZVEZDA  
in Russian 8 Feb 90 p 2

[Interview with Colonel N. Yendovitskiy, Chief of a Department of the Ground Forces Main Staff, by Lieutenant-Colonel G. Lisenkov: "What Will Replace NVP [Pre-Draft Training]"]

[Text] Colonel N. Yendovitskiy, Chief of a Department of the Ground Forces Main Staff, answers KRASNAYA ZVEZDA's questions.

[Lisenkov] Letters arriving at the editorial office take note of the fact that pre-draft training has lost prestige at pedagogical collectives and among students. Nikolay Kozmich, does your staff know about this and what is your reaction to the situation?

[Yendovitskiy] New standard acts have been prepared for review by the government that define the introduction of defense physical fitness training in place of NVP [pre-draft training] for pre-draft age and draft age young men who are fit for military service. While developing these documents, we proceeded on the assumption that the orientation of pre-draft training, program content, and the forms for conducting exercises were in many ways outmoded. All proposals from the floor were considered. The drafts of the standard acts are being reviewed in the ministries, state committees and departments concerned, and also in the union republic Councils of Ministers.

The purpose of defense physical fitness training is [to ensure] young men undergoing the training course are able to complete the young recruit general military training program and to master weapons and combat equipment entrusted to them in a short period of time. In our opinion, defense physical fitness training must become a mandatory subject taught in the Russian language and carried out in harmonious unity with heroic-patriotic education.

We envision having a defense physical fitness training leader position in place of a military training officer position on the staffs of educational institutions. And at locations where the defense physical fitness training leader's teaching load exceeds the prescribed number of hours, we will have a defense physical fitness training teacher with benefits extended to him that are intended for the pre-draft training officer. We envision allocating 160 study hours for this training (including 35 hours for

teaching the civil defense course) including the 140 hours previously devoted to pre-draft training, and using 20 hours of physical fitness training time in the teaching plan.

Changes are also being introduced in the conduct of young men's field training sessions at defense sports health camps. This is the concluding stage of their training for service. We intend to conduct sessions during the 10th and 11th school years, at senior PTU [Vocational and Technical School] courses and technicums with a duration of not 14 and five days as it is at the present time but six and three days (tests) respectively and only by using time allocated for this training.

As for young men of draft age who have not undergone defense physical fitness training at educational institutions, who are also not recommended for this training at these institutions, and who have received unsatisfactory final evaluations upon graduation from educational institutions, we propose that they undergo defense physical fitness training not at enterprise training facilities (that have not proved to be worthwhile) but at defense sports health camps immediately prior to the draft using the training session method with a 180 hour hiatus from production.

[Lisenkov] What do you think we need to do in the immediate future to rapidly restructure to such an organization for young men's pre-draft training?

[Yendovitskiy] I must say bluntly that the USSR State Committee for Public Education is very passive with regard to training young men for military service. And the USSR Law "On Compulsory Military Service" does not assign it the responsibility to do this. The fact also is that until now sources have not been identified to finance Article 19 of the USSR Law "On Compulsory Military Service" which assigns the obligation to establish pre-draft training facilities to the republic Councils of Ministers and to Ispolkomes of local Soviets of People's Deputies. As for the ministries, state committees and departments that have educational institutions within their jurisdiction, they allocate a total sum of monetary resources for all subjects. To give you an idea of these sums, I will tell you: they total an average of 30-50 rubles per year per classroom (office). In support of this matter, the drafts of the new standard acts task Republic Councils of Ministers and Ispolkomes of Soviets of People's Deputies with overall local control of defense physical fitness training. They task Ministries, State Committees and Departments within whose jurisdiction these educational institutions are located and local agencies subordinate to them with control directly at training centers for young men-students. They task DOSAAF committees with control at defense sports health camps for young men of draft age.

[Lisenkov] As letters to the editor indicate, we do not have precise criteria upon which to assess pre-draft training. Each committee has its own requirements. What do you propose changing in this regard?

[Yendovitskiy] The Ground Forces Main Staff has developed NVP evaluation criteria and a directive dated 1 March 1989 and has disseminated them to military commissariats, public education agencies, and heads of educational institutions. They were also the basis for developing evaluation criteria of the state of defense physical fitness training that we propose introducing in place of NVP. In the drafts of defense physical fitness training standard acts, we provide for completion of an assessment of the state of this training at an educational institution or at a training center based on assessments of the quality of young men's mastery of the program and the condition of training facilities by determining an assessment value for the quality of program mastery.

Only Republic Councils of Ministers, Ispolkoms of local Soviets of People's Deputies and agencies of Ministries, State Committees and Departments within whose jurisdiction these educational institutions, training centers, and defense sports health camps are located will conduct assessments of the condition of defense physical fitness training while carrying out monitoring in accordance with their own plans. As for USSR Ministry of Defense agencies, we envision that they will only assess the end result—the level of defense physical fitness training of young men and only during test exercises conducted with them at field training sessions at defense sports health camps and at assembly points during the draft for active military service.

Naturally, the defense physical fitness training officers' and teachers' labors will also be assessed based on the quality of the young men's preparation for military service. We all know that military training officers as all other teachers at educational institutions have the right to be nominated for state awards, award of the title of "People's Teacher of the USSR," and "Honored Teacher" and also for other badges and honors. Unfortunately, the USSR Ministry of Defense does not have data at its disposal about the number of military training officers who have received honorary titles and state awards. We also could not obtain this data from the USSR Gosobrazovaniya [USSR State Committee for Education].

I would like to avail myself of the opportunity to tell the readers that each Union Republic has Higher Educational Institutions [VUZ] that teaches students this specialty and RSFSR has one VUZ for each 2-3 oblasts. The VUZ's are accepting persons up to 25 years of age who are subject to a military service obligation and who have completed active military service. A list of these institutions can be obtained at military commissariats and at public education agencies.

In conclusion, I would like to once again emphasize that the organization of defense sports health camps on a state basis to conduct field training sessions with young men undergoing NVP has been defined in a CPSU Central Committee and USSR Council of Ministers Resolution of 10 June 1986 and is scheduled until 1995. Thus, this is not a USSR Ministry of Defense invention

as some people think. Three years of experience in organizing these camps has proven their effectiveness. Of course, this has occurred where the matter is approached in a state manner. We are really not talking about construction of new defense sports health camps. This is quite expensive and those who love to talk about that do not want to think about how to better accomplish the mission defined by the government. We are talking about how we need to creatively approach the solution to this problem while considering local conditions and to attempt to organize a defense sports health camp, let us say, based on a Pioneer or summer work camp and so forth. We cannot expect success where they are not thinking about this or where they are attempting to "save" on the health of young men. As we all know, the stingy pay twice.

#### Georgian Military Preparatory School Noted

90UM0437A Tbilisi MOLODEZH GRUZII in Russian  
23 Feb 90 p 4

[Article by B. Gambashidze, under the headline "This Issue's Photo Report": "The National Cadre is Growing"]

[Text] The republic's K. Leselidze specialized secondary preparatory school is of particular interest as a prototype of a general military educational institution for training a national cadre. The school was established in 1974. Today it is engaged in preparing young men for enrollment in the country's military command schools. It admits 160-170 boys annually from various parts of the republic. As we were told at the school, on the average three out of four students graduate. Not all of the school's graduates subsequently succeed in realizing their dream and attain officer rank. Although, a tendency towards an increase in this percentage has become evident in recent years. At service schools a practice exists of admitting graduates from such schools without entrance exams and without having to compete for admission, if they have successfully passed their final examinations. However, this is not the case everywhere. Depending on the type of service school, there is still a rather stringent professional selection process en route to the service school. Georgian graduates of the preparatory school meet a selection board attached to the republic's military commissariat. But non-Georgian graduates (for which the preparatory school is entitled to reserve up to 15 percent of its seats) are chosen by a selection board, without special preferences, at the respective service school.

—What do you think of the possibility of creating national military units?—we asked Valiko Shurgaya, the director of the school, this question.

—I look favorably upon this issue. But I think that we must create them gradually, starting from small sub-units. We discussed with community representatives the prospect of opening a service school to train cadres

for national divisions at the preparatory school's facilities by 1 September. For the present, such a fundamental reorganization is not practical. We do not have the proper material resources—our resources are on the level of basic military training. The teachers are competent, but at the service school level this is not enough. One can still find teachers of general subjects, but where does one hire experts in, for example, ballistics and other purely military disciplines?! In addition, one division requires about six hundred military specialities.

But this does not mean that we should abandon altogether the idea of creating national military units. It simply means that this transition must be preceded by laborious preparation. And the sooner the problems at the K. Leselidze specialized secondary preparatory school are solved, the more possible it will be to expedite this process.

In the photographs: a typical day at a service school.[Not reproduced].

**Rayon Pre-draft Training Center Created in Omsk**  
*90UM0437B Moscow KRASNAYA ZVEZDA in  
Russian 3 Apr 90 First Edition p 1*

[Article by N. Knysh: "A Pre-draft Training Center is Created"]

[Text] Currently, much is being said and written about basic military training in secondary schools. Some are for abolishing it, others are for shortening the program, and a third group is proposing its demilitarization, so to speak. But in Tsentralnyy Rayon, Omsk, yet another, in my opinion, more rational alternative has been found: a rayon preinduction military training center, the first in the territory of the Siberian Military District, has been created there. M. Blokhina, the head of the rayon department of public education who currently heads the oblast vocational guidance center for students, sponsored its creation.

Classes in basic military training (NVP) are conducted once a week for a duration of four-five hours with students in 10th and 11th grades. Departments of tactical training, weapons training, drill instruction, civil defense, and general military regulations have been established at the center. And for girls there is also a department of medical training. There is even a small-arms range at the training center.

Military instructors from a contingent of reserve officers, among which there are quite a few former instructors from higher service schools, head the departments. They all have outstanding methodological and professional skills. In addition to NVP classes, important work in military patriotism and defense-related sports is conducted at the training center and methodological assistance is rendered to military instructors. The creation of a physical training department is being planned.

**On Military Reform in Prewar Era**

90UM0273A Moscow VOYENNO-ISTORICHESKIY ZHURNAL in Russian No 12, Dec 1989 pp 33-40

[Article, published under the heading "In Aid of Those Studying Military History," by Lt Cols P.F. Vashchenko and V.A. Runov: "Military Reform in the USSR"]

[Text] After the end of the Civil War and the repelling of military intervention, the economic situation of our nation was extremely grave. The total product of large-scale industry was just 1/7 of its prewar production while steel casting was less than 5 percent. Agricultural product had declined by almost 1/2,<sup>1</sup> and the bad harvest of 1921 further intensified the need of the workers. At the same time, the international situation was gradually improving. The Communist and other progressive parties in many nations of the world, in influencing the broad public, forced their governments to recognize the young Soviet republic and halt military actions against it. In 1923-1925, a majority of the European countries and a number of the American and Asian nations established diplomatic relations with our state.

The Soviet government worked out a new economic policy (NEP) and began carrying it out. Simultaneously, it planned a significant reduction in the 5.5-million-strong Red Army and the demobilization of this lasted almost four years, and by the end of 1923 just 561,000 men remained in it.

From November 1920 through November 1922, the questions of military organizational development were discussed nine times at plenums of the RKP(b) [Russian Communist Party (Bolshevik)] Central Committee, 26 times at Politburo sessions, six times before the Council of People's Commissars [SNK] and 17 times before the Labor and Defense Council.<sup>2</sup>

They were reviewed at the 9th All-Russian Congress of Soviets, at the 10th-12th Party Congresses and the February and April (1924) Central Committee Plenums. However, a majority of the military problems remained unsolved, chiefly due to the disruptive activities of L.D. Trotsky who was the USSR people's commissar for military and naval affairs and the chairman of the Revolutionary Military Council of the Republic (RVSR).

For clarifying the situation which had arisen in the Armed Forces and for determining measures to increase their combat capability, the party Central Committee in January 1924 established a special commission headed by the Secretary of the RKP(b) TsKK [Central Control Committee] and member of the Collegium of the USSR People's Commissariat of the Worker-Peasant Inspectorate, S.I. Gusev. The commission members also included A.A. Andreyev, A.S. Bubnov, N.M. Voronin, K.Ye. Voroshilov, M.M. Lashevich, G.K. Ordzhonikidze, A.M. Orekhov, N.S. Unshlikht, M.V. Frunze and M.N. Shvernik. Having studied the state of affairs, the commission concluded that "our Red Army at present

does not exist as an organized, trained, politically educated force supplied with mobilization reserves. At present, in its present form, the Red Army is not battleworthy."<sup>3</sup> The commission pointed out the discovered shortcomings, the factors giving rise to them and also indicated the ways for improving the situation. The measures proposed by it were approved by a Central Committee Plenum and became a program which subsequently was named the military reform of 1924-1925 and which in practical terms continued until 1928. The 13th RKP(b) Congress held in May 1924 approved these measures, having noted in its resolution: "The congress welcomes the steps undertaken by the Central Committee for carrying out a fully necessary reform in the military department and strengthening it with party workers. In line with the role of the territorial formations in the matter of national defense, the Congress draws the party's attention to the need of the most energetic work to strengthen the communist influence in them. The Congress orders the Central Committee to adopt a number of measures for increasing the number of communists among the Red Armymen and sailors."<sup>4</sup> Even in the course of the congress, a conference of military delegates was conducted and this reviewed a number of questions related to military organizational development, the most important of which were: the budget of the RKKA [Worker-Peasant Red Army] and the RKKF [Worker-Peasant Red Navy]<sup>4a</sup> and the material situation of the political personnel; on party work after induction and the relationships of the political bodies with the party organizations; on the work with members of the Red Army Komsomol; on the military press and the military commissariats. From the military delegates, a special commission was established for working out provisions related to work with preinductees, on the work day of the Red Armymen, commanders and political instructors, on the political apparatus of a regiment, the political departments of a territorial division and cavalry brigade. These documents were the first to regulate the life and activities of the Armed Forces during the period of the reform.

For carrying out the measures outlined by the 13th RKP(b) Congress, it was essential first of all to improve the leadership of the armed forces. L.D. Trotsky was removed from the posts held by him. M.V. Frunze headed the RVSR and the People's Commissariat for Military and Naval Affairs. After his death (31 October 1925), K.Ye. Voroshilov was appointed people's commissar for military and naval affairs. By a decision of the Orgburo and Politburo of the RKP(b) Central Committee, V.A. Antonov-Ovseyenko in the post of chief of the Political Directorate and member of the USSR RVs [Revolutionary Military Council] was replaced by A.S. Bubnov who simultaneously remained a member of the Central Committee and the Central Committee Orgburo and from 1925, secretary of the Central Committee.

Overall leadership over the USSR Armed Forces was provided by the USSR RVs and the membership of this was changed. Under it were the RKKA Staff, the RKKA

Directorates, the Political Directorate (from 25 January 1925, the Main Political Directorate of the RKKA), the Directorates of the Air Forces, Navy, Military-Medical, Military-Veterinary, the Chief of Supply of the RKKA and others as well as the commander-in-chief of all the Armed Forces appointed for the period of the war.

**The military reform commenced with a reorganization of the superior leadership bodies of the Armed Forces.** The post of commander-in-chief in peacetime was abolished, and the RKKA Staff was directly subordinate to the USSR RVS. M.V. Frunze held both positions as chief and commissar of the Staff and his assistants were M.N. Tukhachevskiy and B.M. Shaposhnikov. The specially created Directorate of the RKKA<sup>5</sup> became the superior administrative body of the Armed Forces and its task was to direct the current activities of the Armed Forces. For supervising the course of combat training and for inspecting, a special body was established, the RKKA Inspectorate headed by the former commander-in-chief S.S. Kamanev. In truth, in October 1924, it was incorporated in the RKKA Staff. Such a dividing of functions which up to this time had been completely entrusted to the RKKA Staff made it possible for the latter to concentrate on solving the most important problems of preparing the nation and the Armed Forces for defense. In defining the tasks of the RKKA Staff, M.V. Frunze wrote: "This operations staff should become not only the brains of the Red Army, it should also become the military brains for our entire Soviet state and should provide the material which lies at the basis of the work done by the Defense Council."<sup>6</sup> The RKKA Staff included the following directorates: Operations, Organizational-Mobilizational, Military Lines of Communications, Intelligence and Combat Training.<sup>7</sup>

There was a significant cutback in the TOE of the superior command bodies, and the paper-bureaucratic methods of troop leadership were decisively rejected (reporting for an army was reduced by almost 70 percent and the efficient handling of official documents rose sharply).

By the Order of the USSR RVS of 15 April 1924, a new, much more simplified and efficient structure was introduced for the district command bodies. At the head of all the facilities of a military district stood the RVS [revolutionary military council] responsible for preparing the district defenses, the combat training of the troops and their command as well as for the work of the military commissariats. Prominent Soviet military leaders were appointed as the military district commanders and they had rich experience in troop command. These included K.Ye. Voroshilov, A.I. Yegorov, A.I. Kork, M.K. Levan-dovskiy, I.P. Uborevich, I.E. Yakir and others.

The system of troop supply was improved. The units were given the right to procure food products on the spot, and obtain clothing and supplies directly from the district magazines and dumps, bypassing the intermediate levels.

In the course of the military reform, the organizational structure of the Armed Forces was reinforced in legislation. In the Law Governing Obligatory Military Service approved on 18 September 1925, it stated that "the organization of worker armed forces is the Worker-Peasant Red Army of the Union of Soviet Socialist Republics. The RKKA is divided into land, sea and air forces. The Red Army also includes special purpose troops such as: the Troops of the United State Political Directorate and the Convoy Troops."<sup>8</sup>

A most important component part in the reform of the RKKA was the better quality of training for the Army and Navy command personnel. In terms of the level of professional training, the RKKA command personnel was divided into three groups. Of the greatest value on this level were the so-called "military specialists" who were officers and generals from the former Tsarist Army who had voluntarily gone over to the side of the revolution. Their number remained very significant. According to the estimates of historians, during the period from 1918 through 1920, there were 75,000 former officers and generals fighting in the ranks of the Red Army, and this was 34-37 percent of its command personnel.<sup>11</sup> After the end of the Civil War and in line with the cutback in the RKKA, a majority of the "military specialists" was demobilized, however the most meritorious remained in the ranks comprising their most trained portion. A special place among them was held by the graduates of the Nikolay General Staff Academy, the former tsarist generals and admirals A.A. Baltiyskiy, Ye.A. Berens, M.D. Bonch-Bruyevich, A.A. Brusilov, P.P. Lebedev, N.D. Nadezhnyy, A.V. Nemitts, F.F. Novitskiy, V.A. Olderogge, N.M. Potapov, A.A. Samoylo, A.A. Svechin, A.Ye. Snesarev, P.P. Sytin, Yu.M. Sheyde-man, and the former colonels, lieutenant colonels, captains and other officers who had outstanding general and military training as well as combat experience in two or three wars.

In the second group were the practical commanders who did not have a military education but who had gained rich combat experience in the years of the Civil War. They made up the basic mass of command personnel in the prereform RKKA, however their further use required a decisive rise in the general educational and professional level. The given task was complicated by the fact that the level of basic training for these persons and the positions held by them were very varied and this greatly impeded the creating of a uniform system of their training. For example, the legendary army commander, S.M. Budennyy, had a general education within the limits of a parish church school and a military education in a school for cavalry junior officers. At the same time, his combat experience had been shaped in the flames of three wars: Russo-Japanese, World War I and the Civil War. Equally low was the level of the general educational and military training for a significant portion of the commanders of divisions, regiments and battalions (squadrons). For carrying out this important task it was essential to set up a network of military schools and

academies with various preparatory programs and designed for the varying general educational and command level of the students. Moreover, it was essential to set up additional training for that portion of the command personnel which had completed various military schools during the years of the Civil War, in studying under an extremely condensed program. For this reason, along with the base schools and academies, they also organized a network of different courses and schools for increasing the general educational and professional level of the Red commanders.

An equally important task of the military reform was a qualitative training for the middle-level commanders from among the youth who during the years of Soviet power had been able to gain certain education but did not have combat experience. For them, various military schools were opened with a period of instruction from three to four years. In their walls the officer candidates gained not only good special military training but also a general education on the level of a secondary school and for certain social disciplines (history, political economy and philosophy) a special course was given for them.

The system of commander training in the units was improved and this provided for compulsory official exercises and voluntary participation in the work of the scientific circles and societies. The basic goals of these exercises were studying equipment and troop tactics, the development of skills in the command of the subunits and fire, improving the methods of training and educating subordinates. Participation in the work of the military scientific circles and societies was expressed chiefly in preparing and listening to reports and papers on military technical questions. Such exercises were conducted daily during the hours free of obligatory attendance.

**In the period of the military reform and enormous role was assigned to creating manuals and regulations many of which appeared for the first time in the RKKA.** Their elaboration required truly titanic effort by many organizations, institutions and authors. Major contributions in this area were made by the chairs of the military academies, the military journals and various military-scientific societies and circles. During that period, M.V. Frunze played a leading role in the development of military theory. In relying on the Marxist-Leninist teachings concerning war and the army, he felt that the system of national defense should be created "in the first place, on a clear and precise notion of the nature of a future war; second, on the correct and accurate consideration of all the forces which our possible enemies would possess; thirdly, on a similar consideration of our own resources."<sup>12</sup> In numerous articles written by Mikhail Vasilyevich [Frunze] in 1924-1925 such as "A Unified Military Doctrine and the Red Army," "The Reorganization of the Red Army," "The Front and Rear in a Future War," "Military-Political Education of the Red Army," "Basic Military Tasks of the Moment," and others, the scientific bases of Soviet military science are set out and the main directions of its development in the

near future were defined. In the last years of his life, M.V. Frunze actively directed the working out of the second portion of the RKKA Provisional Field Manual (Division, Corps). The commission specially established for this work and headed by M.N. Tukhachevskiy included such prominent Soviet military leaders and scientists as S.M. Belitskiy, A.M. Volpe, S.N. Bogomyakov, V.K. Putna and others.

**Thus, in the process of the military reform, a fundamentally new, profoundly scientific and most modern military theoretical base for those times was established for the subsequent successful development of the Soviet Armed Forces and all its services and combat arms.**

After the 14th VKP(b) [All-Union Communist Party (Bolshevik)] Congress, **party political work in the RKKA** underwent further development. In the Bylaws of the VKP(b) there appeared a special section entitled "On Party Organizations in the Red Army," and here it was asserted that "overall leadership of party work in the Red Army and Navy is carried out by the RKKA Political Directorate, as the military department of the Central Committee."<sup>13</sup> The efforts of party political work were concentrated on carrying out the tasks of the organizational development of the Armed Forces and educating the citizen-soldier, the patriot of the nation and internationalist soldier. In the system of political studies for the Red Armymen from October 1924, instead of the former daily political hour, they introduced daily political 2-hour exercises conducted according to a clearly worked out 2-year program. The aim of the program was to have the personnel assimilate the necessary amount of sociopolitical knowledge and have them gain an understanding of the new type of army, its goals, tasks and military history, as well as completely eliminate illiteracy.

Great attention was paid to raising the ideological tempering of the servicemen. The Decree of the Agitation-Propaganda Department of the Party Central Committee adopted in 1927 pointed out that all aspects of army life should be permeated by ideology. For this reason, for the command personnel as early as December 1924, an obligatory minimum of social science and general education knowledge was introduced and this was planned for 3 years for the middle-level command personnel and 2 years for the senior. Within this course, the commanders heard lectures, and political information sessions and seminars were conducted. However, the main form of obtaining knowledge was independent work with the primary sources of the founders of Marxism-Leninism as well as the party and Soviet government documents.

In summing up the first results of the political and ideological work in the RKKA in the spring of 1925, M.V. Frunze wrote: "It can be said boldly that at present the Army and Navy command personnel both in social and political terms represents a homogeneous mass. Its nucleus consists not of representatives from bourgeois landowners groups but rather from peasants and workers

(together they comprise 85 percent)... Thus, at present the Red Army and Navy are in the full sense of the word worker-peasant."<sup>14</sup> This was one of the most important indicators for the successful transition in the organizational development of the USSR Armed Forces from quantitative indicators to qualitative ones.

**A most important measure of the military reform was the establishing of a qualitatively new system for manning the Armed Forces<sup>15</sup>** and this was a composite one combining troop formations of two types: regular which were mentioned above and the territorial-militia ones. The regular formations and units were stationed in the border military districts, the Navy and Air Forces, artillery and certain special services involved with the operation of complicated military equipment.

The basic merit of the territorial militia formations was the relative economicness of training in their system of reserves. While it required around 1,800,000 rubles a year to maintain a regular division in 1925, it cost 1,700,000 rubles a year to maintain a territorial militia division. While in a regular division 4,400 men were given combat training over a period of two years, in a territorial militia one, it was 12,000 men in eight months.<sup>16</sup>

A negative aspect of the composite system was that it did not provide an equally high level of personnel training and combat teamwork in the territorial formations and units. Moreover, the stationing of the troops was determined not by the considerations of military necessity but rather by the historically determined population density in the various regions of the nation. These shortcomings were well known to the Soviet government and under those conditions such a system was the only possible and most rational one. M.V. Frunze said that "if we had a choice between 1.5-2 million men in a regular army and the current militia system, then from the military viewpoint all the data would favor the first solution. But we do not have such a choice. The militia system combined with regular units ensures unconditionally the defense of the Union."<sup>17</sup>

In the course of the military reform, on the basis of the decisions of the 14th Party Congress, they continued to establish nationality troop formations. This was carried out most successfully in the Ukraine, Belorussia, in the Transcaucasus Federative Socialist Republic. In the Central Asian Republics, the organizing of nationality formations and units was complicated by the fact that their peoples had not previously undergone military service and in addition they lacked trained nationality command personnel. For this reason, the policy was set of gradually reducing these. By the spring of 1925, nationality formations comprised not over 10 percent of the total strength of the RKKA.

**The establishing of an ordered system for military service by the nation's citizens was a major contribution to the organizational development of the Armed Forces and the strengthening of their defense might. With the**

adopting of the Law Governing Compulsory Military Service (18 September 1925), its total length for the rank-and-file and junior command personnel was set at 21 years, including: two years of preinduction training, five years in active military service and 14 years in the reserves. Preinduction training was carried out according to a standard program at special training facilities while on the job or off the job at brief assemblies (up to a month over a period of two years). The students of the technical schools, worker faculties and VUZes underwent this training at their schools.

**The introduction of one-man command** (Order of the USSR RVS No. 234 of 2 March 1925) was a significant step in the question of restructuring the Red Army to quality parameters. At the first stage, this had two forms: complete and incomplete. With complete one-man command, the commander was in charge of drill, administrative-housekeeping and political work, being actually both commander and commissar simultaneously. With incomplete one-man command, the commander was responsible only for the drilling and administrative-housekeeping work while the commissar headed the party and political work in the formation and unit. However, both these officials were equally responsible for the political and morale state of the personnel in the entire troop collective entrusted to them.

Only party members who had the necessary command experience, a high level of political training and experience in party political work were appointed solely responsible commanders. In 1925, there were few such men in the RKKA and for this reason one-man command was not introduced all at once in all the Armed Forces, but rather gradually, as the commanders gained the necessary knowledge and skills.

However, the introduction of one-man command in no way meant a reduced role for party political work in the troops, the party and Komsomol organizations and political bodies. On the contrary, the party Central Committee in its instructions "On One-Man Command in the Red Army" emphasized that "carrying out one-man command demands a maximum strengthening of political work and the greatest possible influence of the party in the units."<sup>19</sup> For this reason, during the period of the military reform, measures were implemented to further improve and strengthen the party-political bodies and improve their activities. All the attempts by the Trotskyites to divorce the army party organization from the life of the party and people were decisively rebuffed.

Regardless of the harsh economic conditions which became established in our nation in the 1920s, the RKKA continued to receive the necessary funds for strengthening its combat potential. The nation's military budget increased year after year. While in 1923-1924 this equalled 377 million rubles, in 1924-1925 it was already 420 million rubles, in 1925-1926, 551 million rubles, and in 1926-1927, 634 million rubles.<sup>20</sup> As a result, over the three years, the military budget increased almost by 1.8-fold. The distribution of these funds is shown in the table.

Distribution of USSR Military Budget in 1924-1927*			
Expenditure Name	Share of Expenses, %		
	1924-25	1925-26	1926-27
Pay of servicemen	26.69	26.09	22.91
In-kind supply	27.23	24.42	26.01
Technical supply	36.46	40.65	44.62
Organizational-administrative expenses	7.59	6.33	4.41
Training and cultural-educational expenditures	2.03	2.51	2.45
Total	100.0	100.0	100.0

\* N.B. Berzhm, "Voyennaya reforma v SSSR (1924-1925)" [Military Reform in the USSR (1924-1925)], Moscow, 1958, p 451.

From this document it can be seen that with a constant rise in the budget, the basic portion of expenditures went for the technical supply of the troops, in-kind supply and pay for the servicemen. At the same time, the share of organizational and administrative expenditures steadily declined. Extremely insufficient was the level of allocating funds for training and cultural-educational work as this was the basis of the professional and general educational training of the RKKA personnel. Still, the allocated funds were clearly insufficient for fully guaranteeing the nation's military security as even the 1926-1927 military budget was only 40 percent of the military budget of Tsarist Russia in 1913. Under these conditions, it was extremely important to mobilize the men and the people to carry out defense tasks without involving additional money. One of the ways for carrying out such a task was the holding of the nationwide "Defense Week" from 10 through 17 June 1927. Upon the appeal of the Party Central Committee, the Komsomol Central Committee and the Soviet government, hundreds of thousands of Soviet people and Army and Navy personnel in their free time worked gratis in the defense industry in creating training and cultural-service facilities for the troops. During these days, in addition to the additional output of weapons and combat equipment, troop ranges and training centers were equipped, and thousands of rifle ranges were built throughout the nation. The rural workers provided a significant number of riding and draft horses, hundreds of tons of fodder and other products for the needs of the army. The joint Plenum of the Central Committee and the VKP(b) TsKK held at the end of June and the beginning of August 1927, stated that in carrying out the "Defense Week" the working class of the nation had showed its solidarity with the party, the ability to lead the peasantry and a readiness to defend with their very lives the center of the international revolution against attack by imperialism.

Consequently, in the period of the military reform of 1924-1928, a firm basis was established for the nation's defense capability and a qualitatively new RKKA was created. The Decree of the VKP(b) Central Committee "On the State of USSR Defense" of 15 July 1929 pointed out: "...the basic result of the current five-year period

(1924-1929) in the planned organizational development of the Armed Forces is the creation of a strong, battle-worthy army, in political terms completely reliable and in technical terms standing on the development level of the nation's productive forces."<sup>21</sup>

The experience of the military reform of 1924-1928 to a definite degree has maintained its pertinence in our times. The years-long peaceful policy of the CPSU and the concrete defensive doctrine of the USSR encountered a broad response throughout the world and created real prospects for the first steps in disarmament and reducing the overall size of the armies of states. Under these conditions, for the Soviet people it has been extremely important to create a small but completely defense-capable armed forces of the USSR and our Warsaw Pact allies. Just as 60 years ago, there is the urgent problem of converting the Army, Air Forces and Navy from quantitative parameters to qualitative ones. And although not all the ways of this complex process have been completely applicable under present-day conditions, a majority of them has, namely: the elaboration of a clear, most economic system for training the military personnel and reserves; improving the structure and methods of the work of the headquarters bodies with a reduction in their size and bureaucracy; strengthening of discipline and order in the troops with a reinforcing of the democratic bases for the development of their party and Komsomol organizations and much else. All these have been reflected in the speeches of many delegates of the Congress of Soviets, having thereby shown their vitality and pertinence during the period of perestroika which has developed widely in the USSR Armed Forces after the already historic 27th CPSU Congress. Their effectiveness will be tested by time.

#### Footnotes

1. "Istoriya SSSR v dokumentakh i illyustratsiyakh (1917-1980)" [History of the USSR in Documents and Illustrations (1917-1980)], Moscow, 1981, p 89.
2. "Voyennyye voprosy v kurse istorii SSSR" [Military Questions in the Course of USSR History], Moscow, Voenizdat, 1986, p 134.
3. "KPSS i stroitelstvo Sovetskikh Vooruzhennykh Sil" [The CPSU and the Organizational Development of the Soviet Armed Forces], Moscow, Voenizdat, 2d Revised and Supplemented Edition, 1967, p 137.
4. "KPSS v rozolyutsiyakh i resheniyakh syezdov, konferentsiy i plenumov TsK" [The CPSU in Resolutions and Decisions of Congresses, Conferences and Central Committee Plenums], Moscow, Politizdat, 9th Supplemented and Revised Edition, Vol 3, 1984, p 208.
- 4a. Worker-Peasant Red Army and Worker-Peasant Red Navy.
5. TsGASA [Central State Archives of the Soviet Army], folio 4, inv. 1, file 720, sheet 12. In the autumn of 1924, it was renamed the RKKA Main Directorate.

6. M.V. Frunze, "Sobr. soch." [Collected Works], Moscow-Leningrad, Gosizdat, Vol II, p 32.
7. TsGASA, folio 4, inv. 1, file 743, sheet 21.
8. "Zakon ob obyazatelnoy voyennoy sluzhbe: v novoy redaktsii" [Law Governing Universal Military Service: New Version], Moscow, Voyenizdat, 1931, p 7.
9. [Not in text]
10. [Not in text]
11. A.G. Kavtaradze, "Voyennyye spetsialisty na sluzhbe Respubliki Sovetov, 1917-1920 gg." [Military Specialists in the Service of the Soviet Republic, 1917-1920], Moscow, Nauka, 1988, pp 175-176.
12. M.V. Frunze, "Izbrannyye proizvedeniya" [Selected Works], Moscow, Voyenizdat, Vol II, 1957, p 342.
13. "KPSS v rezolyutsiyakh...", Vol 3, p 486.
14. M.V. Frunze, "Sobr. soch.," Vol II, pp 140-141.
15. The system of manning the RKKA during the interwar period has been described in greater detail in the article by N.A. Maltsev "Professional or Militia?" published in the previous issue of VOYENNO-ISTORICHESKIY ZHURNAL (No 11).
16. TsGASA, folio 4, inv. 2, file 39, sheet 27.
17. M.V. Frunze, "Izbrannyye proizvedeniya," Vol 2, p 378.
18. [Not in text]
19. "KPSS o Vooruzhennykh Silakh Sovetskogo Soyuza. Dokumenty 1917-1968" [The CPSU on the Armed Forces of the Soviet Union. Documents 1917-1968], Moscow, Voyenizdat, 1969, p 229.
20. N.B. Berzhm, "Voyennaya reforma v SSSR (1924-1925)" [Military Reform in the USSR (1924-1925)], Moscow, 1958, p 450.
21. "KPSS o Vooruzhennykh...", p 264.

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**Maj Gen Yakovlev on Experience as Adviser in Vietnam**

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[Commentary by Major-General Aleksandr Yakovlev, recorded by V. Shurygin, under the rubric "The Unknown War": "Soldiers of Distant Jungles"]

[Text] For many years there lived among us people who did not wear their orders on holidays and whom it was forbidden by censorship to call soldier/internationalists. The entire nation knew about the "Afghans," the "Koreans," the "Vietnamese" and the "Egyptians" only by hearsay.

We inaugurate the rubric "The Unknown War" with an article by Major-General Aleksandr Yakovlev, who fought in Vietnam at the end of the '60s.

...They say today that Vietnam was a testing ground for new types of weapons. That might be so. In general, all of the new items at that time did pass through us. The Shrikes, the "unmanned," the Walleyes, the Skyhawks—one cannot recall them all today. That was 20 years ago. To us Soviet military advisors, however, Vietnam was and remains Vietnam, a nation which required our assistance, our knowledge, our skill. A land where we left friends and comrades. Where we left a part of our hearts and souls. Where we were singed by the fiery wind of that far-off war.

We flew into Hanoi in the morning. There was a briefing at the embassy, then preparations. Literally on the fifth day they came for us from the regiment.

The situation was calm at that time. The aviation was engaged in practically no combat operations over North Vietnam. The battle area had shifted to the south, toward the 17th parallel. Forces and equipment were being massed before the crucial encounters.

The SAM regiment in which we were to serve was a special unit. It was even called a hero-regiment. Suffice it to say that prior to our arrival (and we were the first Soviet military specialists in the unit) regimental missilemen had shot down six B-52 bombers in addition to other aircraft. At the time the Soviets arrived the regiment had been removed from the southern regions for replenishments following heavy losses. It was May of '69....

The area of the 17th parallel was ever-present on the pages of the world press at that time. We—11 Soviet military advisors—also knew of it, of course. I had never before imagined, however, that I would be there myself.

Incidentally, with respect to the selection and makeup of our military advisors, I could not fail to mention the universal rejection of all volunteers, of which there were many at that time. Officers and enlisted men submitted requests to be sent to Vietnam, eager to help the much-suffering people there. To my memory not one of the requests was satisfied. It seems to me that this was a result of the bureaucratic tendency to play it safe, which was already flourishing at that time.

And so, the 17th parallel: a strip of land seared by napalm and pockmarked with craters. The square rice paddies and groves of fruit trees were both a place of work for the peasants, a battlefield and a cemetery—many of them died with hoes in their hands, blown up by mines, struck by bombs or shelled by shipboard artillery.

The people adjusted to this war. The American air force completely dominated the skies during the day. Ground-attack aircraft destroyed everything indiscriminately, be it a medical vehicle or a peasant draft team.

The area of the Blue River, 250 kilometers south of the city of Vieng in the province of Quang Binh, was designated as our area of combat operations. An important communications center was located there. We arrived in maximum secrecy and concealment. We deployed and... just three days later we heard over the American radio that air defense missile units had been deployed around the province of Quang Binh.

Assessing the enemy, I would like particularly to note the quality of his reconnaissance. It was carried out with such thoroughness that our every move became known to the Americans literally within a few days. Aerial reconnaissance provided a great deal of information, of course. I believe, however, that secret agents were just as hard at work....

The attitude of the Americans toward the presence of Soviet advisors in units of the people's army was also peculiar. As long as active combat operations were not underway, it was familiar and tolerant. Well aware of the location of our camp, American pilots returning from missions more than once flew over us, dipped their wings, as though to say "Greetings, Russians!" There were even cases in which leaflets were dropped indicating the time at which some target would be bombed and suggesting that the Soviet advisors leave the danger zone. When active combat operations began, however, and aircraft losses increased sharply, all traces of the geniality disappeared. Early one May morning the camp was subjected to fierce bombing and turned into a conflagration within a matter of minutes. Just by chance no one was there at the time....

The fighting had begun. Ambushes became the main and only possible method of combatting the American aviation in that situation. Battalions secretly departed into the jungles, deployed there at position prepared in advance and... froze in place. The air situation and the areas over which the flights were made were studied for several days, intelligence was prepared and only then was firing conducted.

...A light F-105 glided over a small valley squeezed between two mountains. Minus suspension systems and made as light as possible, it was at the same time a scout and a lure. An assault group proceeded somewhere behind it. A pair of Phantoms appeared out of the clouds over the valley a few dozen seconds later. The ambush came to life. The first missile destroyed the lead aircraft. It plunged, a burning torch, into the jungle. The wingman turned sharply and attacked the battalion position. It came closer and closer. A little more, and the bombs would head downward, but suddenly a SAM missile flew into the sky directly ahead of it. Deciding that this was the battalion's position, the Phantom swept into a dive toward the dummy position and exposed itself to artillery fire.

The brief salvo from the antiaircraft gunners was terrible. The aircraft simply disintegrated in the air and plunged to earth in a pile of fragments. A parachute

canopy opened up like a dandelion in the empty sky. A helicopter sent to assist the pilot was also destroyed a few minutes later....

Sometime later a large group of assault aircraft struck with missiles and bombs against the misslemen's disposition. The bombs exploded in a vacant area, however. The battalion had already moved out. Minutes decided everything. If the launchers had not left the area within 40 minutes following the missile launch, they would have had practically no chance of remaining intact. The Americans bombed with the accuracy of sharpshooters.

Our regiment was covered by batteries of tube antiaircraft artillery. And they did an excellent job. The artillermen were amazingly well trained. Here is one illustration. The antiaircraft artillermen trained by firing at aircraft mockups lowered from a tree on a string. Until the target was lowered, they stood with their backs to it. Within a matter of seconds a crew had to deploy, detect, identify and shell the target. Engaging in this practice for eight hours a day, they polished their skill to the point of some sort of inhuman, electronic perfection.

...It should be pointed out that the Vietnamese were fighting an extremely powerful enemy. The magnificent training of the pilots, the precise organization of combat operations, in-depth reconnaissance and persistence in achieving the missions—all of these qualities were manifested in full measure in Vietnam. And the slightest error or imprecision resulted in a defeat. The Americans knew how to fight. The fact is that they were taught this by the Vietnamese, however. Enormous losses forced the U.S. air command element to revise most of its principles, alter its tactics, increase the pilots' willingness to take risks....

Reconnaissance was countered with camouflage. And what camouflage it was. It was amazingly original. Here is one example. The launchers were set up one time in a thick palm growth, from which it was simply impossible to fire. When only a few seconds remained to launching, however, the palm trees were bent over with ropes in the sector in which the launcher was set up, and the missiles sailed into the sky through a narrow corridor between the trunks.

We were amazed by many things. And although we ourselves were misslemen and had studied camouflage in the Union, Vietnam turned our concepts of camouflage upside down. What did it take, for example, to launch missiles into a sky covered with a mass of branches? Any of our commanders would only have grasped his head: How is it possible?! There are fins, aerodynamics....

Behind these short, slender people in the cork helmets and ubiquitous green shirts without epaulets was something which we did not have; experience, years of fighting a powerful enemy. And there was sometimes nothing for us to do but learn from them.

Everything was camouflaged. The roads over which the battalions traveled were turned into jungles again at night. The command and control shacks were not to be found without a guide. And all of this in mountains, on broken terrain.

Nor was it easy for us Soviets. Our group, headed by Col Yury Ivanovich Mukhanov, was a sort of regiment in miniature. It included leading specialists on all the systems of a missile complex: launchers and diesel-engine specialists, interceptor-controllers and electronics specialists. We were the intellectual center and the engineer service of the regiment. While the Vietnamese fightingmen were excellently trained in tactics and combat, they experienced difficulties in technical matters. And the equipment was capricious in the jungle situation. This was understandable, given the high humidity and temperature. More than once there were cases also of simply incompetent servicing of the complexes. Several missiles missed their targets by a long distance, for example, because the PVDs [pitot-static tubes] were covered with insulating tape. This was apparently done to prevent them from being damaged by moisture. In a word, we had more than enough problems.

The Vietnamese greatly appreciated our help and our knowledge. They did not trust us immediately, however, but only after recognizing the skill of each person. It was for this reason that they set up tests for the newcomers. A day or two after a new specialist had arrived, he would be asked to come and check out a system. The problem would be such that it could only have been deliberately produced.

This is how they checked out our training. It might have been slightly offensive, but those acknowledged as specialists enjoyed total confidence. And this was understandable. If the complex were in good working order, enemy aircraft would be shot down.

The Americans also felt this. In just a few months the missilemen destroyed eight U.S. aircraft. This did not include the antiaircraft covering artillery attached to us, which changed the views of many military authorities of the cannon as an obsolete weapon for combatting aircraft. Further acknowledgment of our services was the fact that the regimental commander visited us and a reception was held by the provincial party secretary following each successful launching.

They called us only by our first names. For some reason the Vietnamese particularly liked the short form of Aleksandr, my name: Sanya. There were two of us Sanyas—big and little—in our group. I was the little one. The reason why they liked the name soon became clear. We learned that in Vietnamese “sa-nya” means far from home. And there was something symbolic in this translation. Sanya—far from home.

It was indeed a long way from home. We lived in light wooden structures called bungalows. The climate was very difficult: temperatures near 40 degrees, high humidity and jungles. One could not take a step without

an axe or a special knife. Efficiency drops in such a situation. And then we had to sit in the command and control shack, where it was even hotter.

Movies were our main entertainment. I remember that our group was the first to grab the film “Diamond Hand,” which had just arrived at the embassy. We showed it for more than a month. We frequently watched other new films from the Union as well. We read, of course. We played tennis, volleyball and chess. We even celebrated New Year. Instead of a fir we set up a pine tree, to be sure, or something like a local fir. We made toys ourselves. The Vietnamese celebrate New Year by the lunar calendar. And this was the Year of the Rooster.

What was our material situation like? A year as duty counted as two, just as it does in the north in the Union, the only difference being that we had a war underway. One wage went to the family in the Union. But I did not receive such a large amount even in Vietnam.

...We left Vietnam with mixed feelings of joy, sadness and dissatisfaction. The joy was because we were going to see the homeland, see people near and dear. The sadness and dissatisfaction came from the fact that we were leaving part of our soul in that land. Friends and colleagues were being left behind. The war also. We were leaving, taking with us experience, expertise....

I could probably bring my memories to an end on this minor note, but something troubles me. Why is it that when I recall my years of service since Vietnam, I have a sort of bitter residue in my heart? I felt that our experience and expertise would find worthy application in the homeland, that everything new acquired in the fighting would be adopted in our troop training.

That is not what happened. Everything proceeded as usual. Details, alert duty, service, work. And no one was in any hurry to adopt our know-how, to learn from us. To change something in the organization of the service and the combat training. Nothing happened except for friends inquiring, when we gathered in our free time: “How was it there in Vietnam? It was probably hot, wasn’t it?”

This was annoying and... frightening. Honestly, it was frightening. Frightening because of our complacency, our attitude of jubilation. Deficiencies and mistakes in the combat training system were painful to see and nerve-racking. We knew what our errors cost us, though. Not once and not just a couple of times we saw launchers warped by explosions, burned shacks, the graves of soldiers and officers. Two of four Vietnamese technicians with whom I worked subsequently died in battle. And these were veteran, tempered fighters.

That which was a basic principle in Vietnam frequently turned out to be a secondary matter here. Take march training, for example, without which not a single antiaircraft missile unit in Vietnam could have existed for more than a day but which was regarded as punishment from God in the Union. Not to speak of the fact that we took

such a long time setting up and deploying that, had it been in Vietnam, there would have been nothing left of the battalions.

Of what value were our "demonstration" positions for the battalions, with their bright markers, smooth, sandy paths, small fir trees planted in perfectly straight rows? It was as though all of this was designed for detection and the guidance of aircraft. Only two years later the Egyptian aviation and air defense forces paid dearly for neglecting camouflage, when most of their aircraft and launchers were destroyed at airfields and at their positions during the first minutes of the war.

All of this was painful to the heart. And one's own helplessness and inability to change anything was doubly painful. Even 20 years ago, for example, the subsidiary farms and hay procurement were unhesitatingly chosen over combat training.

We have not been overly anxious to support the officers with combat experience and the personnel agencies. I have frequently heard statements made with envy: Why you were abroad, pampered. What more do you need? They did not like the intractability and unwillingness to compromise of those who returned from the battle area. There were cases in which certain officers were sent to serve as far away as possible, their advancement in the service was "suppressed," at the first opportunity they were discharged into the reserve....

And this occurred not just with the "Vietnamese." I have heard similar accounts from comrades who fought in the Near East, in Korea—living witnesses to how we learned to fight in a war, frequently repeating those same errors from one war to the next.

### Military Side of Cuban Missile Crisis Recalled

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4 Feb 90 First Edition p 2

[Article by KRASNAYA ZVEZDA correspondent Lieutenant-Colonel A. Dokuchayev: "Operation 'Anadyr': A Look Back Over the Years"; first paragraph is KRASNAYA ZVEZDA introduction]

[Text] On the morning of 27 October 1962 Soviet air defense missilemen destroyed an American U-2 reconnaissance aircraft flying over Cuba. The pilot was killed. The Commanding General of the U.S. Air Force immediately thereafter proposed delivering an aerial strike against the island. Other military persons exerted strong pressure on President John Kennedy throughout the day. Soviet Ambassador A.F. Dobrynin was told that war may break out. In Moscow in the evening of the 27th and early morning of the 28th of October members of the CPSU Central Committee Presidium and leading officials of the Council of Ministers and Ministry of Defense were on their feet. Under discussion at the governmental dacha in Ogarevo was the U.S. offer of removal of Soviet missiles from Cuba in exchange for a guarantee of noninterference in the internal affairs of the country,

with recognition of and respect for its sovereignty. Again and again reports were heard from marshals, generals, and officials of the Ministry of Foreign Affairs. A decision was made. The text of an address by N.S. Khrushchev and J. Kennedy was read over Moscow radio. The American side accepted the proposed compromise. In this article we provide the military aspect of the crisis in the Caribbean in detail for the first time. Participating in the discussion with our correspondent were former internationalist soldiers Reserve Major General L. Garbuz and Reserve Colonels I. Shishchenko, A. Burlov, and N. Peregudov.

[KRASNAYA ZVEZDA] It is common knowledge that on 12 July 1962, the "Khabarovsk," our first large-tonnage ship, set sail for the shores of Cuba with a cargo of military equipment. This was the origin of undertakings intended to strengthen the defensive capability of the young state.

[L. Garbuz (in 1962 on the staff of the Commander of the Soviet forces in Cuba; Major-General)] Our steps were retaliatory. Before that there were the Bay of Pigs, attempts to suffocate Cuba by means of an economic blockade, and a series of provocative exercises held near the island. The participants in one of the exercises were presented with a mission: "Overthrow of Leader Ort-sac." Read the last word backwards and you will see what was meant.

[KRASNAYA ZVEZDA] Short-range missiles were also delivered to Cuba. Who made that decision?

[L. Garbuz] It all started in June, during a session of the Defense Council, which was attended by members of the CPSU Central Committee Presidium, Central Committee Secretaries, and leading officials of the Ministry of Defense. They were discussing the question of how to prevent armed aggression against Cuba. N.S. Khrushchev openly came out with the suggestion of missiles. Nikita Sergeyevich said that only they could cool the ardor of the Americans. Minister of Defense R.Ya. Malinovskiy supported the idea of missiles. He—the same as Khrushchev—reasoned that the installation of missiles in Cuba would be the most weighty argument against aggression.

Shortly thereafter a Soviet delegation headed for Cuba. Travelling with it under the guise of "Engineer Petrov" was Marshal of the Soviet Union S.S. Biryuzov, who at that time was in charge of missile troops. The delegation presented the Cuban authorities with our proposals, which were accepted. The General Staff then initiated planning the delivery of troops and missiles to the Western Hemisphere—Operation "Anadyr."

In the initial phase, even officers holding responsible positions were not informed of the ultimate purposes of the movement of units. Ships sailed out of various ports located in the European part of the country. It was suggested to the servicemen that they take along fur-lined coats, fur boots, gloves, and winter caps.

[N. Peregudov (in 1962 chief of staff of an air defense missile unit)] Air defense troops were among the first to be sent. They departed from Nikolayev. We thought that we were headed for Bulgaria, since it was planned at that time to hold exercises for the armies of the Warsaw Pact countries. The question was then asked: Why the fur-lined coats and fur boots? Shortly thereafter Marshal of Aviation Sudets, at that time the Commander of PVO (Air Defense) Forces, arrived at the port to hand us an envelope bearing the signatures of the minister of defense and minister of the Navy.

"Open the envelope after you pass Gibraltar. You will all travel aboard a ship carrying agricultural specialists."

Then we realized: We were not going to Bulgaria. If not, where to? We awaited our arrival at Gibraltar impatiently. When the time came, we opened the envelope to find an order directing us to proceed to Cuba.

So we arrived at our destination. A launch pulled up to the ship; aboard was General S.N. Grechko, who was on the staff of the force in Cuba.

The general explained that we were to disembark at night, but first were to select about 30 men who would set up a meeting with agricultural workers. The people on the island were to believe that we had come to render assistance to Cuban peasants so that they could improve their agriculture.

[KRASNAYA ZVEZDA] How were the strategic missilemen delivered?

[I.Shishchenko] For me—a subunit commander—the prelude to the "ocean cruise" was my recall from leave. Two months later, and the mission.

On 18 September, as we were passing between the island of Sardinia and the Tunisian peninsula, we encountered two American warships. One of them approached with weapons exposed (and her crew at battle stations), standing off a distance of 80 to 100 meters. The Americans used flag signals in their dialogue:

"Where are you headed?"

"Casablanca," we replied as ordered by ship's captain Vasiliy Gurzhiy.

"What do you have aboard?"

"Agricultural equipment."

"Pleasant cruise!"

[L.Garbu] We labored without sleep and rest. We had to deploy dozens of subunits in a short period of time. Arriving in Cuba were missilemen, motorized riflemen, pilots, and men of other branches.

[KRASNAYA ZVEZDA] Who coordinated the activities of all the subunits?

[L.Garbu] The force was commanded by Issa Aleksandrovich Pliyev, General of the Army and a renowned cavalryman. That was his first acquaintance with "our" equipment, with which he became familiar out of curiosity. Every now and then he would refer to the missile battalions as "cavalry troops."

His staff included Lieutenant-General of Aviation P.Dankevich and Lieutenant-Generals P.Akindinov and S.Grechko—masters of their trades.

Major-General Igor Demyanovich Statsenko immediately set up his operations among the missilemen.

[KRASNAYA ZVEZDA] Were you able to maintain secrecy of "Operation Anadyr?"

[L.Garbu] In my view, yes. The Americans now admit that in October of 1962 the CIA estimated Soviet presence in Cuba to be as much as 10,000 men. In reality, there were more than 40,000 there—and 42 strategic missiles.

The secrecy of the troop delivery was stipulated by Khrushchev. I was present at the conference of the force's leaders that was held on 7 July 1962 in the Kremlin in which the head of the Soviet Government described the mission. At that time, two changes were made in the plan that had been drawn up. What were they? In the first few minutes, Khrushchev asked Major General A.A. Dementyev, our advisor to the Cuban leader, the question: "Is it possible to pull off a concealed deployment of troops in a short period of time?" The answer was: "No, Nikita Sergeyevich." Then the reasons were discussed.

The force operational deployment plan underwent substantial changes. It was decided to deliver the missiles after the general-purpose units. We were able to mislead the Americans into relaxing their vigil.

It should be understood that it was simply impossible to land a contingent of troops without any visible signs. The Americans received the first warning from West German intelligence, which provided data on ships with a cargo of weapons that were passing through the Baltic Straits. They fully activated the space system "Samos." High-altitude U-2 aircraft started to conduct aerial photoreconnaissance over Cuban territory.

On 14 October, the U.S. arrived at its final conclusion: There were Soviet medium-range strategic missiles stationed in Cuba. On 22 October Kennedy spoke on the air to announce the "missile crisis," and the country was shocked.

[KRASNAYA ZVEZDA] Now about the missiles—the spark that set the forest on fire, so to speak.

[A.Burlov] How much time I—as an engineer—spent with those missiles! Today they are being destroyed.

The R-12 missiles, which in the West are referred to as SS-4, are of the liquid-propellant type, offering a range

up to 2,000 kilometers. Stationed in Cuba, which is located no further than 150 kilometers from the American shore, they became a strategic weapon that balanced the nuclear risk for the USSR and the USA. In 1962 our inventory included even more powerful missiles—the R-14 (SS-5 in Western terminology)—that were capable of destroying targets located at a distance of 4,000 kilometers. They were not delivered to Cuba, however: The American naval blockade stopped the ships. Khrushchev issued the order for the ships to return.

It should be understood that the missiles themselves presented no great danger. What about the warheads? Twenty units were delivered to Cuba; 20 more were still aboard the ships.

The missiles and their warheads were in separate locations, even at the time of greatest tension—the 27th of October. The command "Load!" was never given.

[KRASNAYA ZVEZDA] Anatoliy Mikhaylovich, can you tell us what you mean by the word "separate?"

[A. Burlov] Separate... It was required to keep the warheads in the proximity of the missiles, no further than 300 meters, in the disposition area. However, the situation necessitated making a change in the procedure. We found a cave, which was located in the mountains, about one kilometer distant. It offered excellent concealment from bomb strikes. That is where we parked vans bearing the warheads for our launchers.

The attachment of a warhead required three hours; if a warhead were already attached, the missile could be made ready for launching in 15 minutes. In this regard, we did not execute any action that was not required by regulations.

[L.Garbz] I would like to return to the conference (of about 40 minutes' duration) that took place in the Kremlin on 7 July 1962. It was attended by eight men, three of which are still alive. The discussion was not recorded, I believe; today it is extremely important to pass along the essence of what was said by the head of the Soviet Government. It amounted to the following: "We are not sending you away to war—there will be none—or to participate in a conflict, but to defend the Cuban Revolution and let the Americans know that there is a force that can oppose them." We carried out N.S. Khrushchev's directive to the letter.

[KRASNAYA ZVEZDA] The fact remains that the Americans could have been tempted to finish off the Soviet missiles. The first-strike strategy is effective.

[L.Garbz] First strike, well...To keep that from happening, we made certain that the missile positions and degree of readiness were concealed. In this way, we deprived the Americans of the opportunity of planning a strike that could be delivered with impunity.

In addition, the Americans knew that the Soviet Union possessed missiles in other than the "Cuban" locations, such as those aboard submarines.

[N.Peregudov] We employed radar to observe how the situation became aggravated. There were hundreds of aircraft in the air in any given hour. The Americans were furious and exerted psychological pressure. Fliers would ask their control station in plain language: "When are we going to hit Cuba?"

Data in our possession were also disturbing. Counterintelligence warned us that we could expect attacks by enemy agents; we prepared to defend our positions. It was determined that the Americans were preparing to snatch a SAM missile. They were rigging helicopters such that they could snatch a missile without landing. We found it necessary to tie down missiles that were being stored.

The time of greatest tension? The 27th of October, of course. U.S. Air Force Major Rudolph Anderson, who was openly photographing missile positions, was knocked down and killed. The Americans could have delivered a strike in the heat of the moment.

[L.Garbz] The decision to destroy the reconnaissance aircraft was made by Lieutenant General Grechko. The two of us were located at the command post. I reported to him that all the missilemen's positions had been "illuminated" and that the aircraft was departing. I insisted: "We must act, Stepan Naumovich." But to knock down an aircraft in that heated situation... Grechko tried again and again to reach the commander, but the telephone was silent. He then gave the order. Ivan Gerchenov's battalion accomplished the mission. Using official language, one may say that the decision to intercept the flight was determined by the strategic operational necessity of denying the U.S. authorities the opportunity of collating intelligence data on the missile force.

The risk was enormous. Shortly thereafter we received a telegram from Moscow. The message consisted of two phrases: "You acted too soon. Possible settlement in progress." However, the Cuban leadership greeted the news of the interception with elation. This was the first time that American aircraft, which were flying with impunity in the skies of Latin American states, were met with resistance.

[KRASNAYA ZVEZDA] Many tasks had to be resolved jointly with the Cubans, no doubt. What kind of impression did our friends create?

[L.Garbz] I met Fidel and Raul Castro, Che Guevara, and other Cuban comrades. They produced a very nice impression. That brotherhood in arms laid the foundation for regular Cuban Armed Forces.

[A.Burlov] On eight and nine November the missilemen were ready to go home. The ships were overflowed at low altitudes many times by U.S. helicopters; they were escorted by warships standing off at 100 meters. The Americans were monitoring the departure of the nuclear missiles, which we were carrying out in the open, on the decks. By that time the situation had been defused and the blockade of Cuba lifted. Disaster had been prevented.

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